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DRAFT CORK COUNTY COUNCIL CLIMATE ACTION PLAN 2024 - 2029

SEA Environmental Report

Prepared for:

Cork County Council

Comhairle Contae Chorcaí
Cork County Council

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SEA Environmental Report for Draft Cork County Council Climate Action Plan 2024 - 2029

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Abstract: Fehily Timoney and Company is pleased to submit this SEA Environmental Report for the LACAP 2024-2029 to Cork County Council for stakeholder and public consultation.

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NON-TECHNICAL SUMMARY

Introduction

This is the Non- Technical Summary of the environmental report for the Strategic Environmental Assessment (SEA) of the Cork County Council (CCC) Draft Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Cork County Council functional area. The purpose of this SEA is to identify and evaluate the likely significant environmental effects of implementation of the LACAP.

Background

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 (herein referred to as the 'Climate Act') sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP will be to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organisation and throughout the local community. LACAPs shall be implemented over a five-year period. Given the scale and nature of the LACAP, environmental effects are likely, and therefore SEA is required to be undertaken on the Plan.

Approach to SEA

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public. These stages are defined as:

- Stage 1 – Screening: deciding whether an SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

The SEA process runs in parallel with the Appropriate Assessment (AA) process, which an assessment process focusing on the potential effects of a plan or project on sites designated for nature protection known as ‘European Sites.’

The Plan

The CCC LACAP is an action plan which defines local level climate adaptation and mitigation measures to support the reduction of GHG emissions within the local authority as an organisation and throughout the local community in the local authority's functional area.

LACAP should have an inward and outward focus. Climate action in the plan should be defined by local authorities for their own organisation which they have full control over (i.e., the inward focus), and for communities in their functional area, which they exert a strong influence over in partnership with relevant stakeholders (i.e., the outward focus).

The plan period for the Draft LACAP will be from 2024 to 2029. The Council must review and update the plan after a period of 5 years.

The LACAP has been developed in accordance with the requirements of Section 16 of the Climate Act. It must be consistent with the Climate Action Plan 2023 (CAP23) and the National Adaptation Framework. Local authority Development Plans must also be aligned with their LACAP.

The overall vision of the Draft LACAP is to deliver effective climate mitigation and adaptation at local level in support of the broader societal goal of achieving climate resilience and climate neutrality.

Through the development and implementation of specific, action-focused, time-bound and measurable actions, the Draft LACAP will achieve the following strategic outcomes (as defined by the Department of the Environment, Climate and Communications Guidelines for Local Authority Climate Action Plans):

1. Provide a strong emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level, while addressing context-specific conditions and support for locally tailored policy making.
2. Deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.
3. Translate and provide strategic direction at local and community levels on the delivery of the national climate objective which is seeking to curb further global warming and to transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050.

The Environmental Baseline

An evaluation and a characterisation of the current state of the environment likely to be affected by the Draft LACAP has been undertaken to inform the SEA process.

The following Environmental Components were considered during this evaluation:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

For clarity and succinctness, and to aid the understanding of non-technical readers, only a brief and non-technical summary of the key issues associated with the environmental baseline relevant to the Draft LACAP has been provided here.

Section 4 of the main body of the SEA Environmental Report contains further detail on baseline environmental characteristics, including a variety of details environmental mapping, for those who wish to develop a more in-depth understanding of the environmental baseline.

Population and Human Health – Key Issues relating to the Draft LACAP

- Recreational and development pressure on habitats and landscapes.
- Population and development growth will potentially influence the energy requirement within the county.
- Population and development growth will potentially influence the decarbonising zone.
- Potential visual effect of green infrastructure development

Biodiversity, Flora and Fauna – Key Issues relating to the Draft LACAP

- Route selection and classification criteria are a key consideration in the development of blueways and greenways within the Draft LACAP due to the largely linear nature of these developments.
- The potential for effects on non-designated biodiversity features e.g. important habitats and species outside designated sites - particularly with regard to fragmentation, barriers to movement and displacement.
- The potential for effects on protected areas: National and European sites (e.g. SAC, SPAs, RAMSAR), National sites (e.g. NHAs) and other Natural Heritage Sites and Conservation Interest Sites e.g. refuge for fauna or flora, wildfowl reserves.
- The potential to spread invasive species.
- The potential for biodiversity enhancement.

Landscape, Seascape & Visual Amenity – Key Issues relating to the Draft LACAP

- Effects of green infrastructure (i.e. blueways, greenways) and renewable energy farm developments on areas of designated landscape quality and scenic views etc.
- Sensitivity of the landscape to change from green infrastructure development.

Cultural Heritage – Key Issues relating to the Draft LACAP

- The potential impact of the development of green infrastructure on archaeological and architectural heritage.
- No existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

Soils – Key Issues relating to the Draft LACAP

- Potential for impacts on soil resources and offshore sediment transport.
- Potential impacts to soils (land) vulnerable to erosion.
- Potential for unearthing contaminated material.

Land Use – Key Issues relating to the Draft LACAP

- Potential constraints on sea fisheries, both during construction and operation of infrastructure projects (i.e. onshore and offshore wind farms) associated with the Draft LACAP.
- Potential constraints on other sectors such as agricultural, forestry and fisheries, primarily related to construction and operation of infrastructure projects (i.e. solar farms, blueways) associated with the Draft LACAP.

Air Quality and Noise – Key Issues relating to the Draft LACAP

- Blueway developments, particularly during the construction phase, may have a temporary negative impact on air quality and create noise pollution.
- Wind farm developments may have impacts on noise pollution, particularly towards sensitive receptors which are in close proximity.

Water – Key Issues relating to the Draft LACAP

- Potential pressures and impacts on water body status from the construction of renewable energy and blueway projects i.e. increased sedimentation, groundwater recharge and accidental spillages.

Material Assets – Key Issues relating to the Draft LACAP

- Disruptions to existing transport infrastructure through the development of alternative options such as active travel routes could occur.
- Demands for increased renewable infrastructure and associated connection networks.
- Visual impact of wind developments on the coastline.
- Effects on sensitive receptors with increased demands for active travel/green/renewable infrastructure, in particular during the construction phase.
- The potential for effects on existing green and blue infrastructure and key ecological corridors from inappropriate development.

Tourism and Recreation – Key Issues relating to the Draft LACAP

- Green infrastructure development may have the potential to restrict or reduce the quality of resources important for recreation and/or tourism including angling facilities, boating activities and/or associated resources.

- The promotion or development of blueways and greenways could add additional loading pressures in terms of visitor interactions at sensitive areas such as trampling, disturbance, erosion, littering etc.

Climate Change – Key Issues relating to the Draft LACAP

- The Draft LACAP will contribute to the targets, set out in the Climate Action Plan 2023.
- The potential impact of changes in climate including flooding and temperature increases should be factored into the Draft LACAP.

Strategic Environmental Objectives

The SEA Directive states that an SEA should also look at *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'* The identification of environmental protection objectives relevant to a plan provide the basis for evaluating the significance of impacts during the SEA process. All environmental protection objectives relevant to the Draft LACAP have been identified.

Strategic Environmental Objectives (SEOs) are methodological measures which facilitate the development of targets against which the environmental effects of the Draft LACAP can be tested. SEOs are based on wider environmental protection objectives on local, regional, national, European and international level that are relevant to CCC's Draft LACAP. They are high-level in nature and set strategic goals for improvement.

All SEOs applicable to the Draft LACAP are presented in the table below.

Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species.1
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.

[1] 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

Environmental Component	SEO Code	Strategic Environmental Objective
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, in response to the biodiversity emergency.
Landscape, Seascape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.

Environmental Component	SEO Code	Strategic Environmental Objective
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

Description and Evaluation of Plan Alternatives

The SEA Directive requires that reasonable alternative means of achieving the strategic goals of the Draft LACAP (taking into account the objectives and the geographical scope of a plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Such reasonable alternative must be realistic and capable of implementation. Reasonable alternatives will be assessed against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the Draft LACAP.

The underpinning goal of the reasonable alternative evaluation process is to ensure that the selection of preferred alternatives by the Local Authority is informed by environmental considerations.

The following reasonable alternatives to the Draft LACAP were identified:

- Alternative 1 - The Pareto Approach: Prioritise reducing GHG emissions from largest GHG emitting sectors to mitigate against climate change impacts.
- Alternative 2 - The Holistic Approach: Adopt a multi-pronged approach and focus on a range of priority areas to mitigate against and adapt to climate change impacts.
- Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP): Adopt a multi-pronged approach - that has a strong community engagement emphasis - and focus on a range of priority areas to mitigate against and adapt to climate change impacts.

An evaluation of the potential effects of the reasonable alternatives on the baseline environment has been carried out in accordance with the SEA Directive and best practice guidelines. A summary of this evaluation is presented below:

- Alternative 1 - The Pareto Approach - will lead to some positive environmental effects and will result in the reduction of GHG emissions in the sectors that the local authority can control or exert substantial influence on that contribute most in terms of GHG emission in the County - the Residential and Transport sectors. It is less likely that this alternative will deliver the wide-ranging climate mitigation and offsetting related action required to fully realise GHG emission reduction potential in the County. It is also less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity, heritage resources, environmental receptors and people from climate change risks. This alternative approach may generate several negative environmental effects, which would not be counterbalanced by the positive environmental effects associated with Alternatives 2 and 3.

- Alternative 2 - The Holistic Approach - and Alternative 3 - The Holistic and Participatory Approach - will both broadly deliver suitably wide ranging and effective climate action. These alternatives have the potential to generate multiple positive environmental effects, including a reduction in GHG emissions at organisational, community and sectoral levels, in addition to a variety of other environmental benefits. These alternatives will place a balanced emphasis on both climate mitigation and adaptation action, ensuring climate change related environmental risks are adequately understood and managed at community level.
- Alternative 3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level. Alternative 3 has better potential there to fully realise potential environmental effects than Alternative 2.

Reasonable Alternative 3 - The Holistic and Participatory Approach - therefore constitutes the preferred alternative or preferred plan.

Evaluation of the Environmental Effects of Plan Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment has been carried out in accordance with the SEA Directive and best practice guidelines. A concise and non-technical summary of the key environmental effects associated with plan implementation is presented below:

- The variety of climate actions defined in the plan, including organisational and community-based actions are likely to positive effect the climate environment.
- The plan is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.
- In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by plan actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended negative environmental effects, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.
- The plan supports the lighting upgrades in the county of Cork. In absence of appropriate mitigation, the wide use of lighting may lead to adverse effects on sensitive nocturnal species.
- Several plan actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may negatively affect the status of protected structures.
- The plan supports the carrying out of a range of flood alleviation and resilience action that will have a positive environmental effect on water quality, hydrology and biodiversity. The delivery of this action has the potential to reduce flood risk and prevent flood events.
- The carrying out of the range flood alleviation and resilience action contained in the plan has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water and biodiversity environments.
- The plan supports the carrying out of a variety of coastal protection related action, including action intended on mitigating coastal flood or erosion risk. These range of actions have the potential to have positive effects on biodiversity, water quality and the soils environment.

- The carrying out of coastal protection related action contained in the plan has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on the water or biodiversity environment.
- Plan actions support better resource management and the circular economy at organisational, community and local area level, which can potentially lead to improvement resource efficiency and reduced lifecycle GHG emissions associated with material production.
- The inappropriate or improper implementation of waste management related action could have unintended, negative environmental and nuisance related effects.
- The plan supports the development of community and local area level nature-based solutions - in response to climate related risk - which are supportive of biodiversity protection and enhancement.
- The plan supports green infrastructure development broadly. In absence of appropriate design and mitigation, the development of green infrastructure that is of a significant scale or extent could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.
- The plan defines a variety of climate adaptation related actions designed to protect human receptors, biodiversity and heritage assets from the impacts of climate change influenced events such as flooding. The implementation of this action has the potential to generated positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.
- Plan actions support the development, expansion and management of safe active travel networks. The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift, reduce traffic related risks and support the reduction of vehicle related emissions.
- Plan actions support the development, expansion and management of safe active travel networks. In the absence of appropriate design and mitigation, the development of active travel networks can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.
- Plan actions support the expansion of the Electric Vehicle (EV) charging network and active travel parking in the local authority functional area. The successful delivery of this action has the potential to underpin the use of EV and active travel modes at community and local area level and support the reduction of vehicle related emissions.
- Plan actions support the expansion of EV charging network and active travel parking across the breadth of the local authority functional area. In the absence of appropriate mitigation, the construction of additional charging point infrastructure can negatively impact on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.

Mitigation Measures

Overview of Mitigation Measures

Potential negative environmental effects that may occur as a result of the implementation of the Draft LACAP (without considering any mitigation) have been identified.

The SEA Directive requires that mitigation measures to prevent, reduce and as fully as possible offset any potential significant negative environmental effects due to the implementation of a plan are defined.

Following the evaluation of environmental effects of plan implementation, the following forms of mitigation have been adopted to ameliorate the negative environments of the Draft LACAP:

- Mitigation through consideration of alternatives.
- Mitigation through integration of environmental considerations into the LACAP.
- Mitigation through consideration of development management standards/environmental protection objectives contained in the CDP.

Environmental considerations were appropriately taken into account during the plan making process and when considering plan alternatives. The preferred plan has been chosen on the basis that it will generate the maximum level of positive climate and environmental co-benefit related effects, and the minimum level of negative environmental effects.

The plan making process was carried out in parallel with the SEA and AA processes. Regular communication and interaction took place between the environmental assessment team and the plan making team. Environmental considerations that came to light during the SEA and AA processes, including consultation processes, were regularly communicated to the plan making team during the plan making process. As necessary, environmental mitigation measures to ameliorate the potential negative environmental effects of implementing the Draft LACAP were developed and then integrated into the Draft LACAP. Much of the environmental mitigation was embedded in the plan early on in the process as a result of this. This process was carried out in an iterative manner to ensure optimal plan making and environmental outcomes. Environmental considerations were also integrated into the plan so as to facilitate maximising identified positive environmental effects of the Draft LACAP.

Mitigation measures have been proposed that maximise the co-benefits of climate action for other environmental components such local air quality, human health, biodiversity, water quality and other interrelated areas (i.e., win-win solutions).

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the plan. This text has been shaped to ensure that environmental considerations are appropriately taken into account during plan implementation. This text has also been shaped to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects.

Several environmental governance principles were established to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects. These environmental governance principles shall underpin and guide plan implementation and shall apply to and be integrated into all actions/activities which result due to the implementation of the plan.

In addition to the environmental mitigation measures integrated into the Draft LACAP, the development management standards and environmental protection measures defined in the CDP will serve to mitigate the environmental effects of any development proposals supported by the Draft LACAP. These development management standards/environmental protection measures have been defined for the express purpose of ensuring proper planning and sustainable development in the County. The CDP has been subject to its own SEA and AA. The Draft LACAP has been prepared having appropriate regard to the policies and objectives contained in the County Development Plan.

Conclusions

The reasonable alternative evaluation has resulted in the development of a Draft LACAP that achieves the best environmental outcomes in comparison to other reasonable alternative considered.

The adoption of the mitigation measures to be integrated into the Draft LACAP, in combination with the continued adoption of the development planning and control related environmental protection measures defined in the CDP will prevent, reduce and as fully as possible offset any potential negative environmental effects due to the implementation of the Draft LACAP. No further mitigation measures are required for the Draft LACAP.

Monitoring Measures

The SEA Directive requires that the environmental effects of the implementation of a plan are monitored in order 'to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action.'

A series of indicators and targets have been established for identified SEOs to enable ongoing monitoring and measurement of LACAP implementation performance, the environmental effects of the implementation of the LACAP and the efficacy of environmental mitigation measures. Such monitoring will be carried out regularly to support plan implementation.

SEO indicators are simple and effective quantifiable indicators used to measure the environmental effects of implementing the Draft LACAP and the progress of SEO objectives and targets. SEO targets set focussed, measurable aims and thresholds that the Draft LACAP can support the achievement of.

A robust monitoring programme has been established for the implementation of the LACAP.

Where monitoring identifies that the implementation of the LACAP is having a significant negative environmental effect, an in-depth review of the LACAP should take place and the LACAP should be updated in a manner that satisfactorily mitigates these environmental effects (i.e., through the adoption of additional environmental mitigation measures.). Similarly, where monitoring indicates that potential positive environmental effects associated with LACAP implementation are not being adequately realised, the LACAP should be reviewed and updated in a manner that supports the realisation of all potential positive environmental effects, having regard to the overall vision and high-level goals of the plan.

1. INTRODUCTION

1.1 Background

Cork County Council (CCC) has prepared the Draft Local Authority Climate Action Plan (herein referred to as the 'Plan' or 'LACAP') 2024-2029 for the Cork County Council functional area.

Section 16 of the Climate Action and Low Carbon Development (Amendment) Act 2021 (herein referred to as the 'Climate Act') sets out the provisions governing the establishment and operation of a LACAP. The broad purpose of a LACAP will be to define adaptation and mitigation measures at local level to support the reduction of Greenhouse Gas (GHG) emissions within a local authority as an organisation and throughout the local community. LACAPs shall be implemented over a five-year period. The Minister for the Environment, Climate and Communications has instructed each Local Authority to make a LACAP within 18 months of enactment and local authorities have 12 months to finalise these plans.

Given the scale and nature of the LACAP, environmental effects are likely, and therefore Strategic Environmental Assessment (SEA)[2] is required to be undertaken on the Plan. Fehily Timoney and Company (FT) have been commissioned by CCC to complete an SEA for the LACAP.

1.2 SEA Environmental Report

This document has been produced by FT and is the SEA Environmental Report for the Draft LACAP. It forms the main written output of the SEA process and as such presents information on the environmental assessment and likely environmental issues related to the implementation of the Draft LACAP.

The broad purpose of this SEA Environmental Report is as follows:

1. Identify, evaluate and describe the likely significant effects on the environment of the draft LACAP and reasonable alternatives.
2. Inform the preparation of the LACAP.
3. Provide environmental authorities and the public with an early opportunity to make submissions on the draft LACAP and its potential environmental effects - and incorporate changes where necessary to the LACAP and SEA processes.

[2] SEA is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.

1.3 Background to SEA and Legislative Context

SEA is required under the EU Council Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive)[3]. The SEA Directive requires that an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.

The overarching objective of the SEA Directive is '*to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans….with a view to promoting sustainable development*'[4]

SEA is a process for evaluating, at the earliest appropriate stage, the environmental consequences of implementing Plan or Programme (P/P) initiatives prepared by authorities at a national, regional or local level or which have been prepared for adoption through legislative means.

SEA is described within the Department of the Environment, Community and Local Government's (2004) Guidelines for Regional Authorities and Planning Authorities on the Implementation of SEA Directive (2001/42/EC) as the *'formal systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt the plan or programme'.*

SEA is intended to provide the framework for influencing decision-making at an earlier stage when P/Ps – which give rise to individual projects – are being developed. It is noted that SEA should result in more sustainable development through the systematic appraisal of policy options.

1.4 Purpose of this SEA

The purpose of SEA in this particular case is to enable local authorities incorporate environmental considerations into decision-making at an early stage and in an integrated way throughout the Draft LACAP-making process and to:

1. Identify, evaluate and describe the likely significant effects on the environment of implementing the draft LACAP.
2. Ensure that identified adverse effects are communicated, mitigated and that the effectiveness of mitigation is monitored.
3. Identify beneficial (and neutral) effects, and to ensure these are communicated.
4. Provide opportunity for stakeholder and public involvement.

[3] Transposing Irish Regulations: S.I. No. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended by S.I. No. 200 of 2011 (European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011). S.I. No. 436 of 2004 (Planning and Development (Strategic Environmental Assessment) Regulations 2004, as amended by S.I. No. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011).

[4] Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment – Guidelines for Regional Authorities and Planning Authorities (Department of the Environment, Community and Local Government, 2004)

1.5 Appropriate Assessment

Appropriate Assessment (AA) is an assessment process focusing on potential effects related to European Sites - which form the Natura 2000 network - these sites have been designated or proposed for designation by virtue of their ecological importance. European Sites include Special Areas of Conservation (SACs) and Special Protection Areas (SPAs).

The Habitats Directive[5] requires, inter alia, that plans (such as the LACAPs) undergo Screening for AA (Stage 1) and if necessary the preparation of a Natura Impact Report (Stage 2), to establish the likely or potential effects on European Sites arising from plan implementation.

This first stage of the AA process is referred to as 'Screening for AA' and the purpose is to determine, on the basis of a preliminary assessment and objective criteria, whether a plan or project, alone and in combination with other plans or projects, could have significant effects on a European Site in view of the site's conservation objectives.

AA Screening has concluded that there are likely significant effects to European sites - if unmitigated - from the implementation of the LACAP. Therefore, the Draft LACAP has been subject to stage 2 of the AA process, and a Natura Impact Report (NIR) has been prepared alongside the SEA - the details of which have been integrated into the SEA process.

[5] Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora

2. THE DRAFT PLAN

2.1 Overview

The CCC LACAP is an action plan which defines local level climate adaptation and mitigation measures to support the reduction of GHG emissions within the local authority as an organisation and throughout the local community in the local authority's functional area.

LACAP should have an inward and outward focus. Climate action in the plan should be defined by local authorities for their own organisation which they have full control over (i.e., the inward focus), and for communities in their functional area, which they exert a strong influence over in partnership with relevant stakeholders (i.e., the outward focus).

The plan period for the Draft LACAP will be from 2024 to 2029. The Council must review and update the plan after a period of 5 years.

The LACAP has been developed in accordance with the requirements of Section 16 of the Climate Act. It must be consistent with the Climate Action Plan 2023 (CAP23) and the National Adaptation Framework. Local authority Development Plans must also be aligned with their LACAP.

2.2 Context

Climate change refers to the long-term changes in the earth's weather patterns or average temperatures. In Ireland this is demonstrated by rising sea levels, extreme weather events and changes in the eco-system. Extensive research and a significant body of evidence has shown a correlation between the increasing global average temperature and the increasing quantity of GHG released into the atmosphere, particularly from anthropogenic sources.

Changes in weather patterns and climate can have significant adverse impacts on the environment and human beings. The Intergovernmental Panel on Climate Change (IPCC) published the Climate Change 2022: *Impacts, Adaptation and Vulnerability in 2022*. Included in this report is an outline of observed impacts of climate change on the environment and human beings. These include impacts from inland flooding, damages to infrastructure, impacts from infectious disease, displacement, animal and livestock health and productivity, mental health and water scarcity derived from climate change.

The seriousness of the potential impacts and risks associated with climate change is reflected in the vast quantity of international, European and national legislation that has been introduced to mitigate those impacts and risks.

The Irish Climate Act provides a statutory underpinning to climate action in Ireland. It specifies the requirement to develop a national Climate Action Plan (and update it every year), a National Adaptation Framework (NAF), a National Long Term Climate Action Strategy and Sectoral Adaptation Plans (SAPs). It also specifies a series of carbon budgets and the associated sectoral emission ceilings.

It sets out actions that must be taken to ensure delivery of commitments and a target to reduce GHG by 51% by 2030 and to achieve net zero GHG emissions by 2050. The successful delivery of climate action and the achievement of these targets will require significant, unanimous effort across all sectors of society.

A key element of the Climate Act is the requirement under Section 16 for local authorities to prepare individual LACAPs for their functional area. The purpose of LACAPs will be to deliver effective climate action and mitigation at local authority and community levels. The Act acknowledges that local authorities are key drivers in advancing and delivering on climate policy.

2.3 Plan Content

The Draft LACAP focusses on several theme areas which are considered to be key for achieving a climate resilient and climate neutral future at organisational and community level. A number of objectives have been developed for each theme area. Multiple specific actions have been defined to support the achievement of these objectives. An overview of the theme areas and objectives under the Draft LACAP is presented in Table 2-1.

Table 2-1: Draft LACAP Theme Area and Main Goals

Theme Area	Objective
Direct Emissions	51% reduction in GREEN HOUSE GASES from the 2016/2018 baseline resulting from the council's electricity usage
	51% reduction in GREEN HOUSE GASES from the 2016/2018 baseline resulting from the council's thermal heating
	51% reduction in GREEN HOUSE GASES from the 2016/2018 baseline resulting from the council's transport use
	50% increase in energy efficiency from the 2009 baseline
Governance	We commit to a clear, county-wide vision and mission for climate action
	We commit to using existing internal structures for aligning and integrating climate action throughout Cork County Council, and developing new structures, where necessary.
	We commit to seeking funding for climate action from external and internal sources
	We commit to enhancing our staff capability to deliver effective climate action
	We commit to continuing to develop the Green Procurement Policy
	We commit that climate will be central when replacing and acquiring new assets and replacing existing assets.
	We commit to Stakeholder Engagement and Collaboration
	We commit to strengthening monitoring and reporting frameworks
	We will support councillors in their roles as public representatives to deliver climate action
Community, Information and Awareness	We commit to support Communities to co-create a vision for a low carbon, biodiversity rich and climate-resilient County.
	We commit to inform, educate and create awareness about climate action and promote engagement
	We commit support the allocation of Government funds and support active engagement in climate action at a local level.
	We commit to gather data and capture insights
	We commit to helping those most affected by weather-related climate impacts We commit to assisting sectors of society that need additional support in the transition to a low carbon economy
	We commit to working for a Just Transition
	We commit to promoting Active Travel
	We commit to promote and encourage self-sufficient communities

Theme Area	Objective
Biodiversity, the Natural Environment, Heritage & Land Use, Land Use Change and Forestry (LULUCF)	Prepare and Implement the Biodiversity Action Plan with cognisance of the impacts of climate change.
	Increase the quality and connectivity of habitats in the county area, to increase benefits to ecology and to increase resilience of biodiversity to the impacts of climate change
	Embed Biodiversity retention and net gain in development and placemaking
	Identify and pursue opportunities for biodiversity enhancement in council-held assets, and lead by example.
	Reduce the threat and impacts of Alien Invasive Species
	Improvement of water quality
	Improvement of Air Quality
	Advance the protections and management of coastlines
	Conserve and manage Ireland's unique heritage for the benefit of present and future generations.
	Promote appreciation of heritage and its contribution to the economy and society and support sustainable heritage practices.
	Consider the impact of land use, land use change and trees, shrubs and woodland on greenhouse gas sequestration and reduced emissions.
	Support climate change adaptation measures in land use, changing land-use, and forestry to sequester carbon and mitigate climate change.
Economy	We commit to supporting businesses and workers to become resilient to shifting industry practices due to climate change
	We commit to embed climate action into all economic plans
	We commit to promoting Climate Action to enterprises in Cork County
	We commit to operating remote work hubs in the County and to develop new hubs
	We commit to create awareness and provide information to protect biodiversity
	We commit to continue to work with stakeholders to agricultural investigations
	We commit to collaborate in relation to water and biodiversity
	We commit to protect public health in relation to water
Transportation	Collaborate with communities and stakeholders to develop integrated transportation throughout the county to reduce GHG emissions.
	Promote Active Travel
	Promote Development to benefit from Transportation capacity
	Promote the use of Electric Vehicles / low emission fuels
	Promote remote working
Waste	Promote and support the Circular economy.
	Work with communities and stakeholders to eliminate littering and dumping
	Reduce emissions from Council landfills
	Work stakeholders to ensure options available for the segregated disposal of waste
Built Environment (Infrastructure, Buildings, Housing & Heritage)	Support the development of renewable energy infrastructure.
	Support the development of district heating infrastructure.
	Support the development of public electric vehicle charging infrastructure.
	Identify opportunities for the use of recycled material in council developed infrastructure.
	Assist the retrofitting of building fabric for existing buildings.

Theme Area	Objective
	Ensure new buildings meet current building regulatory standards.
	Onsite renewable energy generation
	Support actions relating to retrofitting homes.
	EV charging - Future proofing of social housing estates
	Tenant Awareness
	Reduce the impact of overheating, freezing and high wind within the public realm.
	Reduce the impact of flooding within the public realm.
	Reduce the impact of climate change on road infrastructure.

2.4 Overall Vision and Strategic Outcomes

The overall vision of the Draft LACAP for CCC is to become a climate resilient and low carbon organisation that inspires, leads and supports ambitious and just climate action across the county.

Through the development and implementation of specific, action-focused, time-bound and measurable actions, the Draft LACAP will achieve the following strategic outcomes (as defined by the Department of the Environment, Climate and Communications Guidelines for Local Authority Climate Action Plans):

1. Provide a strong emphasis on a place-based approach to climate action, delivering a better understanding of greenhouse gas emissions and climate-related risks at a local level, while addressing context-specific conditions and support for locally tailored policy making.
2. Deliver and promote evidence-based and integrated climate action by way of adaptation and mitigation measures, centred around a strong understanding of the role and remit of the local authority on climate action.
3. Translate and provide strategic direction at local and community levels on the delivery of the national climate objective which is seeking to curb further global warming and to transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy by no later than the end of 2050.

2.5 Relationship of the Plan with other Relevant Plans and Programmes

An examination of how the Draft LACAP interrelates with other national, regional and local plans and programmes has taken place and is documented in Appendix 1.

3. SEA METHODOLOGY

3.1 The SEA Process

The SEA process can be defined by four stages, all of which include some level of consultation with stakeholders and the public (Figure 3-1). These stages are defined as:

- Stage 1 – Screening: deciding whether an SEA is required, or not.
- Stage 2 – Scoping: establishing the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts.
- Stage 3 – Identification, Prediction, Considerations of Alternatives, Evaluation and Mitigation of Potential Impacts.
- Stage 4 – Consultation, Revision and Post-Adoption. This includes the implementation of statutory SEA monitoring.

The SEA process runs in parallel with the Appropriate Assessment (AA) process, which is briefly discussed in Section 1.5

This SEA Environmental Report documents the outcomes of Stage 3.

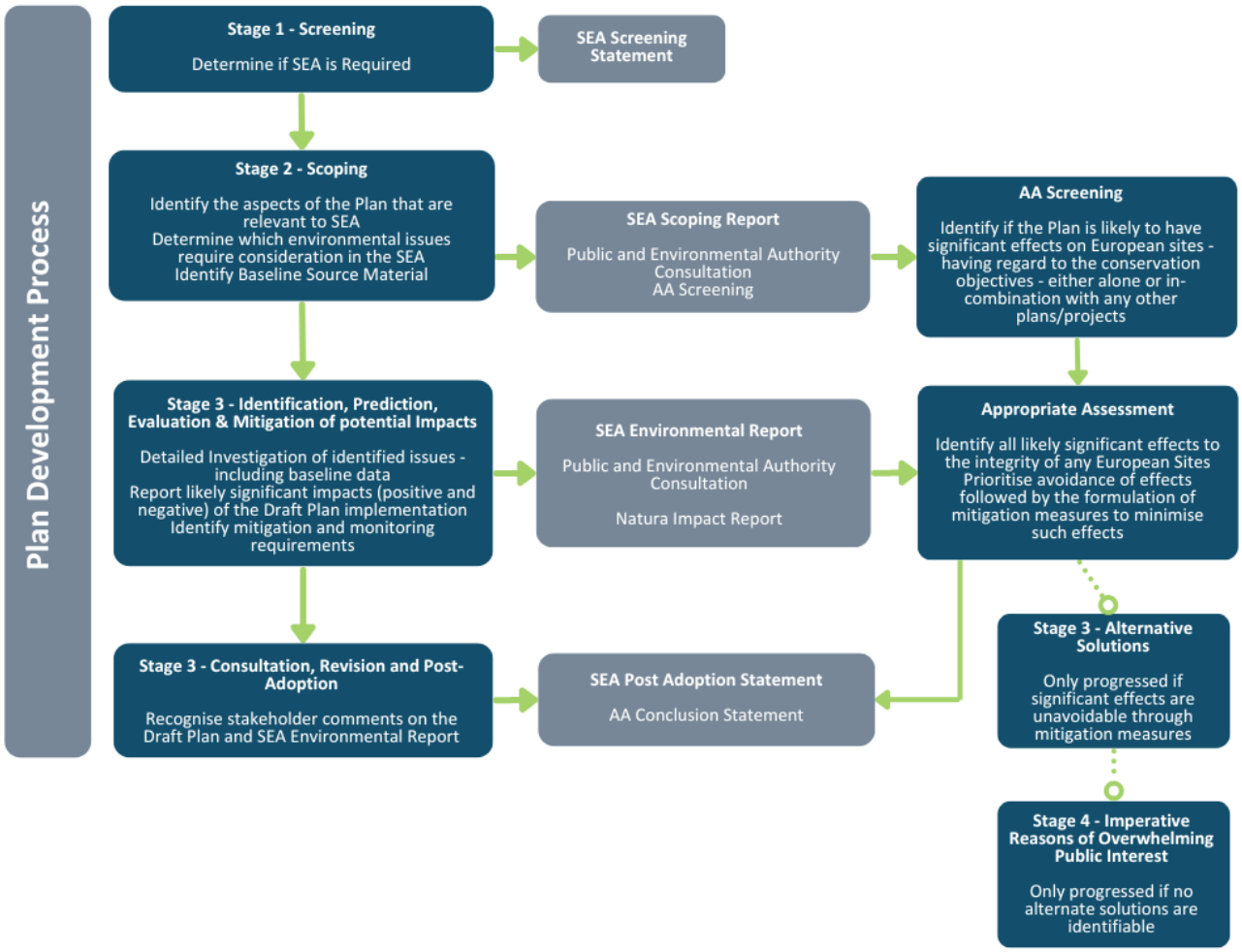


Figure 3-1: SEA and AA Stages and Key Deliverables

3.2 Overview of the LACAP SEA and AA Processes

Given the scale and nature of the LACAP, environmental effects are likely, and therefore SEA has been 'screened in' in this instance.

An SEA Scoping Report was produced for the Draft LACAP. This SEA Scoping Report, along with SEA scoping submissions and consideration of these submissions by the SEA process, has helped communicate and define the scope of the environmental issues which are to be dealt with by the SEA together with the level of detail to which it is intended to address these issues, as per the SEA Guidelines[6].

[6] Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities (DEHLG, 2004), Page 18 "It is recommended that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities."

Figure 3-2 provides an overview of the integrated LACAP-preparation and SEA, Appropriate Assessment (AA)[7] processes. The preparation of the Draft LACAP, SEA and AA are taking place concurrently and the findings of the SEA and AA will inform the Draft LACAP.

Taking into account the scope detailed in the SEA Scoping Report which was produced for the Draft LACAP, the environmental effects associated with the implementation of the Draft LACAP have been identified, evaluated and described in this SEA Environmental Report. This report has also defined mitigation measures to prevent adverse environmental effects due to the implementation of the Draft LACAP. This report will accompany the Draft LACAP on public display as part of the required statutory public consultation. The findings of the AA have also been integrated into the SEA Environmental Report. AA documents will also accompany the Draft LACAP and SEA Environmental Report on public display. The SEA will follow elements of Integrated Biodiversity Impact Assessment[8].

Submissions will be responded to in the Chief Executive's report on public consultation, with updates made to the SEA and AA documentation where relevant.

Any proposed modifications to the LACAP would be examined to ensure that they would not be likely to affect the Natura 2000 network of designated ecological sites and to ensure that they would not be likely to result in significant environmental effects.

When the LACAP is adopted, the SEA and AA documents will be finalised and an SEA Statement, which will include information on how environmental considerations were integrated into the LACAP, will be prepared. The LACAP will then be implemented and environmental monitoring will be undertaken to measure the environmental effects of the plan.

[7] AA is a focused and detailed impact assessment of the implications of a strategic action or project, alone and in combination with other strategic actions and projects, on the integrity of a European site in view of its conservation objectives.

[8] As detailed in the EPA's 2013 Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual.

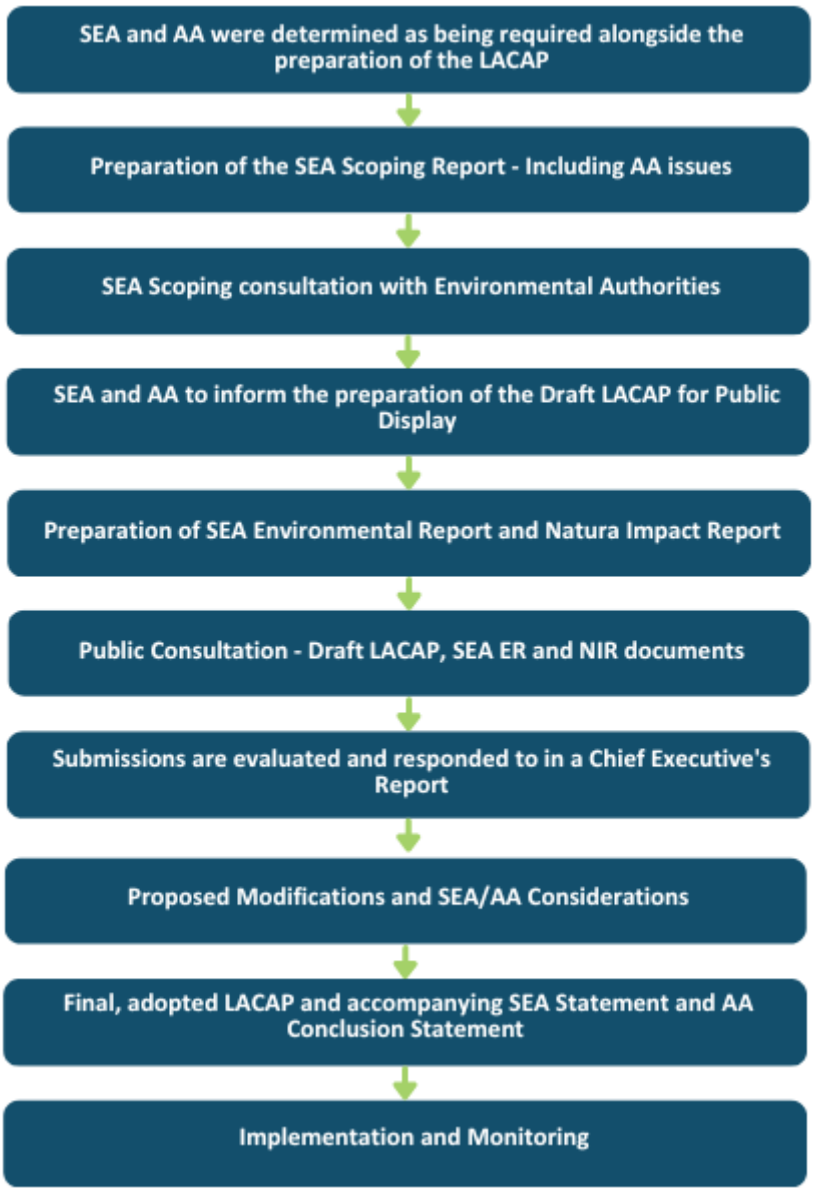


Figure 3-2: Overview of the SEA Process in the Review and Preparation of the Local Authority Climate Action Plan (including AA processes)

3.3 SEA Processes Undertaken To Date

3.3.1 SEA Screening

The first stage of the SEA process is to carry out SEA Screening to determine the requirement for SEA of a P/P.

The first stage in determining whether a P/P requires SEA is the carrying out of a 'Pre-screening Check' (also known as a 'Stage 1 Applicability'). This allows rapid screening-out of P/P that are clearly not going to have any environmental impact and screening-in of those that do require SEA. The second stage in determining whether a P/P requires SEA is known as 'Stage 2 Screening.' The purpose of this stage is to determine whether a P/P is likely to have significant effects on the environment and whether SEA must be carried out in conjunction with a P/P. The application of environmental significance criteria is important in determining whether an SEA is required. Annex II of Directive 2001/42/EC sets out the 'statutory' criteria that should be addressed when undertaking this stage.

Given the scale and nature of the LACAP, environmental effects are likely, and therefore SEA has been 'screened in' in this instance. An SEA Screening Statement to this effect was produced by the CCC LACAP.

The main reasons for 'screening in' in the LACAP are listed below:

1. The LACAP will define a framework sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources.
2. The LACAP has the potential to give rise to environmental problems.
3. The LACAP will support the achievement of the principles and policies of European climate change related legislation (e.g., 'European Climate Law'[9]).
4. The LACAP has the potential to likely significant environmental effects based its impact on likely impact on land use and development, its county-wide geographic scope and the breadth of receiving environmental sensitivities within the county.

3.3.2 SEA Scoping

The second stage of the SEA process is carrying out SEA Scoping. The purpose of SEA Scoping is to establish the spatial and temporal scope of the SEA and a decision-making framework that can be used to evaluate impacts. An SEA Scoping Report is produced to document the scoping process.

FT produced a final SEA Scoping Report for the Draft LACAP which was informed by consultation response from the environmental authorities. The SEA Scoping Report outlined information on the Draft LACAP, including the need for the Draft LACAP, its temporal and geographical area and overall objectives. It facilitated scoping the Environmental Components and understanding the environmental issues to be considered under the SEA process. The Scoping Report was also required to facilitate statutory consultation to ensure that the approach proposed for the SEA is appropriate. A copy of this report was made available to the statutory Environmental Authorities.

The SEA Scoping Report, along with SEA scoping submissions and consideration of these submissions by the SEA process, has helped communicate and define the scope of the environmental issues which are to be dealt with by the SEA, the methods which will be used to address these issues, and the level of detail required to address these issues, as per the SEA Guidelines[10].

[9] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999

[10] Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment Guidelines for Regional Authorities and Planning Authorities (DEHLG, 2004), Page 18: "It is recommended that at the end of the scoping procedure, the plan-making authority should prepare a brief scoping report of its conclusions as to what information is to be included in the environmental report, taking account of any recommendations from the environmental authorities."

The Environmental Components in the SEA Directive that were 'scoped in' are as follows:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

3.3.3 SEA Consultation

Consultation with statutory Environmental Authorities was undertaken to inform the SEA Scoping process. A Draft SEA Scoping Report and appropriate SEA Scoping Questions were issued to statutory Environmental Authorities. The consultation period lasted for 4 weeks.

The following statutory Environmental Authorities and interested stakeholders were consulted on the scope and level of detail of the information to be included in the SEA Environmental Report:

- Department of Agriculture, Food and the Marine (DAFM)
- Department of the Environment, Climate and Communications (DECC)
- Department of Housing, Local Government and Heritage (DHLGH)
- Environmental Protection Agency (EPA)

The consultation feedback is presented in Appendix 2.

In addition to the above statutory Environmental Authorities, the following interested stakeholders will be consulted on the scope and level of detail of the information to be included in the SEA Environmental Report:

- An Taisce
- Birdwatch Ireland
- Climate Change Advisory Council
- Coastwatch
- Department of Enterprise, Trade and Employment (DETE)
- Department of Transport (DoT)
- Electricity Supply Board (ESB)
- Fáilte Ireland
- Gas Networks Ireland

- Industrial Development Authority (IDA)
- Inland Fisheries Ireland (IFI)
- Inland Waterways Association of Ireland (IWAI)
- Landscape Alliance Ireland
- Neighbouring Local Authorities
- Marine Institute
- Office of Public Works (OPW)
- Regional Authorities[11]
- Sustainable Energy Authority of Ireland (SEAI)
- Teagasc
- Tourism Ireland

3.4 SEA Environmental Report

3.4.1 Environmental Assessment Approach and Methodology

The third stage involves the strategic level identification, prediction, evaluation and mitigation of potential environmental impacts associated with the Draft LACAP. An SEA Environmental Report is produced to document this process. The SEA Environmental Report is integral to the SEA process and is compiled during the plan-making process to allow for adequate consideration of the likely, significant environmental effects of the plan and the incorporation of appropriate environmental mitigation measures into the plan. It should serve to guide the plan-making process and ensure optimal environmental outcomes.

The SEA Environmental Report forms the main written output of SEA process. It serves to document the evaluation of the likely, significant environmental effects of implementing the plan on the relevant Environmental Components defined in the SEA Directive. It defines Strategic Environmental Objectives (SEOs) and associated targets and indicators relating to each Environmental Component area. It defines environmental mitigation measures to prevent, reduce and offset the likely, significant environmental effects of implementing the plan and monitoring measures to measure the environmental effects of the plan. It provides the plan-maker, statutory Environmental Authorities, interested stakeholders and the general public with a clear understanding of likely, significant environmental effects associated with implementing a P/P.

A summary of the information contained in an SEA Environmental Report is presented below:

- A non-technical summary of the environmental assessment carried out to inform the SEA Environmental Report.
- A description of the P/P under consideration, including detail on the main goals of the P/P, the contents of the P/P, anticipated P/P outcomes, and how the P/P relates to other P/Ps.
- A description and characterisation of the baseline environment that has the potential to be affected by the implementation of the P/P, including the evolution of the baseline environment without the implementation of the P/P (I.e., under a 'do-nothing' or 'do-minimum' scenario).
- A description of any existing environmental problems relevant to the P/P.

[11] Southern Region.

- Environmental protection objectives (including indicators and targets) relevant to the P/P and the way these objectives and environmental considerations have been taken into during the plan-making process.
- A description of reasonable alternatives identified, the reasons for considering these alternatives within the scope of the environmental assessment, and an evaluation of their likely significant effect on the environment.
- An evaluation of the likely significant effects of the implementation of the P/P (including reasonable alternatives) on the environment, and in particular on the following environmental components: biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
- A description of environmental mitigation measures proposed to prevent, reduce and offset likely significant environmental effects that may occur dur the implementation of the P/P.
- A description of the monitoring measures to be implemented to monitor the likely, significant effects of implementing a P/P.

This SEA Environmental Report has been produced for CCC's Draft LACAP and must be issued to the statutory Environmental Authorities and identified interested stakeholders to allow them to make submissions on the Draft LACAP, the environmental assessment undertaken, and the environmental mitigation and monitoring measures proposed. It must also be published for public display with the Draft LACAP, to allow for members of the public to make submissions on the environmental assessment.

The Draft LACAP and the SEA Environmental Report are due to be published in early Q4 2023 for a four-week consultation period.

3.4.2 SEA Environmental Report Authors

FT is a consultancy based in Cork, Carlow and Dublin, specialising in civil and environmental engineering, planning and environmental assessment. The company has established an experienced, professional team specialising in all forms of statutory environmental assessment, including EIA, AA and SEA. This team has the support of many in-house engineers, scientists, planners and subject specialists.

FT was retained by CCC to undertake SEA of the Draft LACAP and are responsible for the completion of this SEA Environmental Report. The competent experts involved in the preparation of this SEA Environmental Report are outlined in Table 3-1.

Table 3-1: SEA Environmental Report Authors

Name and Qualifications	Project Role	Relevant Experience
Bernie Guinan MSc, BSc. (Envi. Sci & Tech), Dip. Pollution Assessment Control Dip. Business Development	Project Director	Bernie is Director with FT responsible for Waste & Resource Management and Environmental Science. She has 20 years' experience in delivering and managing projects in the environmental sector. Bernie has extensive experience coordinating EIA, SEA and AA projects, including large-scale and complex projects. She has in-depth knowledge of all environmental and planning policy, legislation and guidance.

Name and Qualifications	Project Role	Relevant Experience
Andrew Torsney PhD, Ecotourism and visitor Behaviour Analysis, Trinity College Dublin, 2018 – Present (Part time) MRes Biodiversity and Conservation (Hons.), University of Leeds, UK, 2011 - 2012 BSc Zoology, University College Dublin, 2007 - 2011	Project Manager	Andrew has over 10 years' experience as a professional ecologist. He is responsible for all ecological work from project design and implementation to the preparation of reports. Interaction with key stake holder and statutory bodies such as the NPWS and the EPA is a vital part of this role. His role is diverse and complex working at both plan and project level. He has been the principal ecologist responsible for the preparation and co-ordination of SEA and AA for many statutory land use plans; as well as EcIAs, EIARs and AAs of Projects. Andrew has comprehensive technical knowledge in ecological assessments and legalities of the planning processes to facilitate streamlined delivery of assessments. Andrew is an experienced ecologist who holds four national species derogation licenses for bats (photography & roost disturbance), otters and badgers. Andrew has authored the NBDC Identification Guide to Irelands Bats and the Identification Guide to Regulated Invasive Plants. Andrew is an experienced botanical specialist with a focus on Annex I grassland habitats, having worked on the translocation of lowland hay meadow [6510] containing the floral protection order species meadow barley (Hordeum secalinum).
Richard Deeney Advanced Diploma in Planning and Environmental Law, Kings Inns, Ireland 2017 B.Sc. First Class Honours Degree, Environmental Management, Dublin Institute of Technology, 2012 Chartered Environmentalist, The Society for the Environment	SEA Team Lead	Richard is Senior Environmental Scientist at Fehily Timoney. Richard holds a B.Sc. First-Class Honours degree in Environmental Management from Dublin Institute of Technology. Richard works in the Waste and Environment team at Fehily Timoney and is experienced in project managing and coordination of Planning Applications, Strategic Environmental Assessments, Environmental Impact Assessment Reports and Environmental Assessment, EIAR Screening and Scoping Reports, the development of Environmental Management Plans and Systems, Environmental Auditing, and Air Emission Assessment. Richard has excellent experience in planning and environmental assessment for various types of development including waste facilities, quarries, renewable energy development and tourism development. He has experience completing baseline air emissions assessments for a range of organizations.
Eunice Wong B.Sc. First Class Honours, Environmental Science and Sustainable Technology, Munster Technological University, 2022	Project Support	Eunice is an Environmental Scientist on the Waste and Environmental Team at Fehily Timoney and Company. Eunice holds a First-Class Honours BSc in Environmental Science and Sustainable Technology from Munster Technological University. Eunice has been involved in a variety of diverse and challenging projects since joining FT covering key aspects of remediation, baseline emission inventories, amenity development, environmental assessment, and monitoring. She has been responsible for the research, data collation, validation, and analysis for a multitude of projects, including desk-based studies, research, as well as the development of associated reports.
Bruna Felipe BE (Hons) Environmental Engineering UNESP, Sao Paulo State University, Brazil	Project Support	Bruna is a Project Environmental Engineer of Fehily Timoney and Company. Bruna holds a BE of Environmental Engineering from UNESP, Sao Paulo State University, Brazil. Bruna has been involved in a range of contaminated land projects and Tier II Environmental Risk Assessments (ERA). Bruna has been responsible for the data collation, validation and analysis for the preparation of ERA reports for a range of landfill related projects, including works related to meeting environmental monitoring and license compliance for a variety of landfills. She has been involved in the preparation of Appropriate Assessment reports and a European Sites library for the Department of Agriculture, Food and Marine. She also has experience developing baseline emission

Name and Qualifications	Project Role	Relevant Experience
		inventories and conducting baseline environmental assessments for multiple projects.
Eibhlin Vaughan First Class Honors BA in Environmental Science, Trinity College Dublin ,2020	Project Support	Eibhlín is an Environmental Scientist on the Waste and Environmental Team at Fehily Timoney and Company. Eibhlín holds a BA in Environmental Science from Trinity College Dublin where she achieved First Class Honours. As a Graduate Environmental Scientist, she has undertaken a dynamic role, spanning EIAR handling, environmental monitoring, proficient report writing, research, data analysis, and the formulation of effective waste management strategies. Alongside her role within the company, Eibhlín is also completing a Research MEngSc in University College Dublin, for which data collection, analysis, and report writing and presentation play a key role.

3.4.3 Difficulties Encountered

No significant difficulties have been encountered during the undertaking of the assessment.

3.4.4 SEA Environmental Report Checklist

A checklist of information that must be included in this SEA Environmental Report under the SEA Directive and transposing national legislation[12] is provided in Table 3-2. This checklist cross-references the sections in the report where information can be found.

Table 3-2: SEA Environmental Report Checklist

Information Required	Relevant Section of the SEA Environmental Report
An outline of the contents and main goals of the plan and relationship with other relevant plans.	Section 2.
The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan.	Section 4.
The environmental characteristics of areas likely to be significantly affected.	Section 4.
Any existing environmental problems which are relevant to the plan including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to the Birds Directive or Habitats Directive.	Section 4.
The environmental protection objectives, established at international, European Union or national level, which are relevant to the plan and the way those objectives and any environmental considerations have been taken into account during its preparation.	Section 5.

[12] The Environmental Report is required to contain the information specified in Annex 1 of the SEA Directive and Schedule 2 and 2B of S.I. 435 and 436 of 2004.

Information Required	Relevant Section of the SEA Environmental Report
The likely significant effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.	Section 7 and Appendix 3.
The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan.	Section 8.
An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.	Section 6.
A description of the measures envisaged concerning monitoring of the significant environmental effects of implementation of the plan.	Section 9.
A non-technical summary of the information provided under the above headings.	Front Section.
Interrelationships between each Environmental Component.	Section 7 and Appendix 3.

3.5 SEA Statement

The final LACAP will be published by February 2024 at the latest. CCC will publish a post adoption SEA Statement alongside the final Plan. The post adoption SEA Statement is another integral component of the SEA process.

The SEA Statement will provide detail on how the environmental assessment and considerations detailed in the SEA Environmental Report and SEA related consultation responses throughout the process have influenced the plan-making process. It will summarise the reasoning for choosing the adopted, final LACAP in light of other reasonable alternative. The SEA will contain detail of environmental mitigation and monitoring measures to be implemented over the lifetime of the LACAP.

The main purpose of the SEA Statement is to provide interested parties with a good and clear understanding of how the SEA process was carried out during the plan-making process and how SEA informed and supported the process.

3.6 Integrated Biodiversity Impact Assessment

The environmental assessment undertaken has been carried out in accordance with an Integrated Biodiversity Impact Assessment based methodology in accordance with EPA's guidance document entitled *'Final Report: Integrated Biodiversity Impact Assessment, Streamlining AA, SEA and EIA Processes. Best Practice Guidance.'* (2012).

The methodology employed facilities the integration of SEA and AA processes relating to biodiversity impact assessment to ensure the effective and streamlined assessment of biodiversity impacts. The plan-making, SEA and AA processes - including scoping, baseline evaluation, impact assessment and mitigation/monitoring measure development processes - have been carried out concurrently to facilitate holistic and complete assessment of biodiversity impacts. The effective communication and integration of scientific knowledge and analysis between assessments has taken place. The SEA is suitably informed by the analysis and conclusions in AA.

3.7 Outcomes of the LACAP SEA and AA Processes

The SEA and AA processes will facilitate the integration of environmental considerations into the Draft LACAP, including policies and objectives contributing towards environmental protection and management and sustainable development; and the integration of environmental considerations into the policies and objectives included as part of the LACAP.

4. THE ENVIRONMENTAL BASELINE

4.1 Introduction

An evaluation and a characterisation of the current state of the environment likely to be affected by the Draft LACAP has been undertaken to inform the SEA process. This section of the SEA Environmental Report documents this evaluation. The following Environmental Components were considered during this evaluation:

- Population and Human Health
- Biodiversity, Flora & Fauna
- Landscape, Seascape & Visual Amenity
- Cultural Heritage - Archaeology & Architectural
- Soils
- Land Use
- Air Quality & Noise
- Water
- Material Assets
- Tourism & Recreation
- Climate Change

Baseline environmental information for the local authority functional area (herein referred to as the 'study area') has been gathered using available environmental datasets. The evaluation of the baseline environment has been informed by the SEA Scoping Report produced and the consultation responses received during the SEA Scoping process. It has also been guided and informed by the in-depth experience and expert judgement of the SEA Environmental Report Authors.

This section of the SEA Environmental Report includes information on the state of the environment within the defined study area (Figure 4-1), including maps of individual environmental components, environmental sensitivity mapping and a description of the baseline environment under the Environmental Components identified by the SEA Directive and transposing Regulations (i.e. population and human health, biodiversity and flora and fauna, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these factors). Existing environmental problems which are relevant to the Draft LACAP have been identified and examined under each Environmental Component heading.

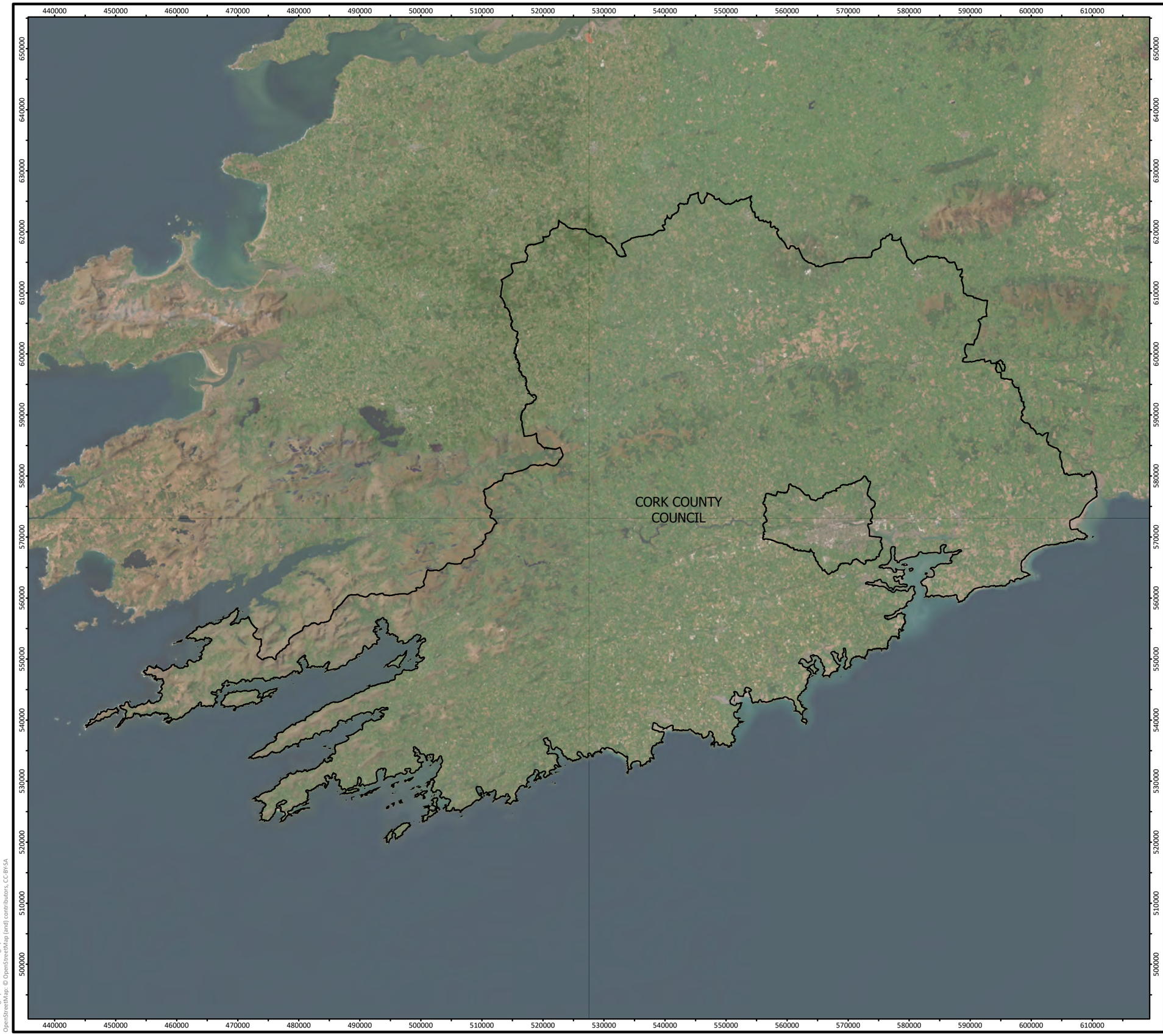
The SEA Environmental Report has also considered the zone of influence for the Draft LACAP and includes baseline information beyond the Draft LACAP boundary for certain environmental components (E.g., European Sites and the status of shared water bodies).

Information provided in this section is based on readily available baseline data from web-based searches and Geographic Information Systems (GIS) information. A key resource which has been used throughout the SEA process is the EPA's SEA Spatial Information Sources Inventory[13]. The data presented in this section of the SEA Environmental Report is as up-to-date and as accurate as possible and is presented in a readily accessible format, where possible.

The interrelationships between Environmental Components are addressed throughout this section, as appropriate, under each Environmental Component heading. A summary of Environmental Component interrelationships is also provided.

This section of the SEA Environmental Report examines the likely evolution of the baseline environmental in the absence of the LACAP being implemented (i.e., in the 'do nothing' or 'do minimum' scenario).

[13] Environmental Protection Agency. 2022. SEA Spatial Information Sources: Available at Strategic Environmental Assessment | Environmental Protection Agency (epa.ie)



Legend

Local Authority Boundaries

Local Authority Boundary

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.1
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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4.2 Population and Human Health

In the 2022 Census, the total population of County Cork including Cork City was 584,156 persons, showing the trend of an increase in total population in the County by ca. 7.6% (41,288 persons)[14] since the previous Census.

County Cork is identified by the Southern Assembly Regional Spatial and Economic Strategy (RSES) as being part of the South-West Region. The transitional population projection for Cork County until 2031 is between 382,000 - 398,000 persons[15].

There are no population projections in the Draft LACAP as the provisions relate only to climate action – however, there are features within the Draft LACAP which could influence population projections for the county and interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes.
- Renewable energy development could influence population dynamics within the county.
- Increased constraints on land use zoning objectives in the decarbonisation zone.
- Potential effects on water quality.

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses, for example.

4.2.1 Key Issues Relating to the Draft LACAP

- Recreational and development pressure on habitats and landscapes.
- Population and development growth will potentially influence the energy requirement within the county.
- Population and development growth will potentially influence the decarbonisation zone.
- Potential visual effect of green infrastructure development.

[14] Central Statistics Office. 2022. FY003B - Population and Actual and Percentage Change 2006 to 2022 (cso.ie) https://data.cso.ie/table/FY003B

[15] *Regional Spatial and Economic Strategy for the* Southern *Region*

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4.3 Biodiversity, Flora and Fauna

The SEA has considered available information on designated sites of conservation interest as well as protected species, ecological connectivity and non-designated habitats which have high ecological value. The SEA has also identified data sources which are appropriate to local, project level development and assessments.

Table 4-1: Designated Ecological Sites and Protected Species

Environmental Features	Description
UNESCO[16] (United Nations Educational, Scientific and Cultural Organisation) World Heritage and Biosphere sites	**There are no UNESCO World Heritage Sites within the County. The closest sites are located within County Kerry; these include Sceilg Mhichíl and Kerry Biosphere Reserve.**
Special Areas of Conservation[17] (SACs)[18]	Designated under the Habitats Directive (Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora). **There are 30 designated SACs within, partially within or adjacent to the Plan area, of which the most notable sites include: Three Castle Head to Mizen Head SAC (000109), Barley Cove to Ballyrisode Point SAC (001040), Sheep's Head SAC (000102), Kenmare River SAC (002158), Killarney National Park, Macgillycuddy's Reeks And Caragh River Catchment SAC (000365) and Blackwater River (Cork/Waterford) SAC (002170).** These and other sites beyond the County border that could be affected by the Draft LACAP will be considered by the assessments.
Special Protection Areas[19] (SPAs)[20]	Designated under the Birds Directive (EC Directive 200/147/EC on the conservation of wild birds). **There are 18 designated SPAs within, partially within or adjacent to the Plan area, including: Kilcolman Bog SPA (004095), Blackwater Callows SPA (004094), Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA (004161), Mullaghanish to Musheramore Mountains SPA (004162), The Gearagh SPA (004109), Beara Peninsula SPA (004155), The Bull And The Cow Rocks SPA (004066), Sheep's Head to Toe Head SPA (004156), Galley Head to Duneen Point SPA (004190), Clonakilty Bay SPA (004081), Seven Heads SPA (004191), Courtmacsherry Bay SPA (004219), Old Head of Kinsale SPA (004021), Sovereign Islands SPA (004124), Cork Harbour SPA (004030), Ballycotton Bay SPA (004022), Ballymacoda Bay SPA (004023) and Blackwater Estuary SPA (004028).** These and other sites beyond the County border that could be affected by the Draft LACAP will be considered by the assessments.
RAMSAR sites[21]	The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl.

[16] UNESCO Sites in Ireland - HeritageMaps.ie - data.gov.ie
[17] Designated site data | National Parks & Wildlife Service (npws.ie)
[18] Habitats Directive (1992/43/EEC) - habitats and species listed in Annex I and II
[19] Designated site data | National Parks & Wildlife Service (npws.ie)
[20] Birds Directive (2009/147/EEC)
[21] Ramsar Sites - Datasets - data.gov.ie

Environmental Features	Description
	This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. **There are 5 designated Ramsar sites within and partially within the Plan boundary; The Gearagh, Cork Harbour, Ballycotton Bay, Ballymacoda and Blackwater Estuary.**
Natural Heritage Areas[22] (NHAs)	NHAs are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000. **There are 10 designated NHAs within, partially within or adjacent to the Plan area; Boggeragh Mountains NHA (002447), Conigar Bog NHA (002386), Leahill Bog NHA (002417), Trafrask Bog NHA (002371), Derreennatra Bog NHA (002105), Hungry Hill Bog NHA (001059), Pulleen Harbour Bog NHA (002416), Sillahertane Bog NHA (001882), Mount Eagle Bogs NHA (002449) and Lough Gay Bog NHA (002454).**
Proposed Natural Heritage Areas (pNHAs)[23]	pNHAs were published on a non-statutory basis in 1995 but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats. **There are 115 pNHAs within or partially within the County, of which the most notable sites include: Sheep's Head (000102), Roaringwater Bay And Islands (000101), Blackwater River Callows (000073), and Great Island Channel (001058).**
Tree Preservation Order (TPO)	Tree Preservation Orders may be made under Section 45 of the Local Government (Planning and Development) Act, 1963 and subsequent acts. Part XIII of the Planning and Development Act, 2000 sets out the provisions for TPOs. TPOs can be made in the interest of amenity or the environment and allow for the protection of individual or groups of trees. **6 TPOs within the County have been identified within the County Development Plan.**
Flora Protection Order Sites[24]	The Flora (Protection) Order, 2022 (S.I. No. 235 of 2022) gives legal protection to 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Act, 1976 is set out in the Flora (Protection) Order, 2022, which supercedes orders made in 1980, 1987, 1999 and 2015. **There are 29 designated Flora Protection Order Sites within the Plan area; including Allihies , Ballinhassig , Ballycotton , Ballymaquirk Bridge , Bantry , Bantry House , Barley Cove , Cappaghglass , Castletownshend Wood, Clear Island , Cobh , Coomroe , Dromore , Glanworth , Glengarriff , Hungry Hill , Killavullen Bridge , Kinsale , Knocknamaddree , Knockomagh , Lackawee , Mount Gunnery , Nowen Hill , Pass of Keimaneigh , Passage , Sherkin Island , Shronowen Bog , Tallowbridge , and Youghal.**
Wildfowl Sanctuaries[25] (see S.I. 192 of 1979)	Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

[22] Natural Heritage Areas (NHA) | National Parks & Wildlife Service (npws.ie)
[23] EPA Maps
[24] Flora Protection Order Map Viewer (npws.ie)
[25] Wildfowl Sanctuaries | National Parks & Wildlife Service (npws.ie)

Environmental Features	Description
	There are 4 designated Wildfowl Sanctuaries within the Plan area; including: Ballynamona – Shannagarry (WFS-08), Kilcolman Bog (WFS-09), Lough Aderry (WFS-10) and The Lee Reservoir (WFS-11).
Salmonid Waters[26]	Salmonid waters are designated and protected as under the European Communities (Quality of Salmonid Waters) Regulations 1988 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (Salmo salar), trout (Salmo trutta), char (Salvelinus) and whitefish (Coregonus). **There are 5 designated salmonid river channels that flow within the County boundary. These are Blackwater [Munster], Bride [Waterford], Argideen, segments of the River Lee [Cork], and part of Feale.**
OSPAR Marine Protected Areas[27] (MPA)	Under the OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity (i.e., OSPAR MPAs). There are currently 19 OSPAR sites proposed in the State. **There are 3 MPAs within, partially within or adjacent to the County boundary, which include Kenmare River MPA, Roaring water Bay and Islands MPA, and South West Porcupine Bank MPA.**
CORINE Landcover[28]	Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. **The most dominant land cover type is agricultural pastures and arable land. Coniferous forests and semi-natural areas are found in the central and northern part of the County, and those forests which are accompanied by wetlands exist mostly in the western and upland areas. Urban fabric/Artificial surfaces are located in towns scattered across the County, such as west of Cork City, Mallow, Fermoy, and Midleton etc.**
National Parks	National Parks are specially designated protected areas of unspoilt beauty and there are six located in Ireland. The primary purpose of the National Parks is the conservation of biodiversity and landscape; however, they also provide recreational space for locals and visitors. **There are no National Parks within the County boundary, but the nearest National Park is in County Kerry - Killarney National Park.**
Nature Reserves[29]	A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organizations or private landowners. **There are 6 Nature Reserves within, partially within, or adjacent to the County boundary. These are Capel Island and Knockadoon Head Nature Reserve, Clochar na gCon/Bealacooan Bog Nature Reserve, Kilcolman Bog Nature Reserve, The Gearagh Nature Reserve, Lough Hyne Nature Reserve, Glengarriff Woods Nature Reserve.**

[26] Register of Protected Areas - Salmonid Water Regs Table - Datasets - data.gov.ie
[27] OSPAR Convention to Protect the Marine Environment of the North East Atlantic, Ireland committed to establishing marine protected areas to protect biodiversity
[28] EPA Maps
[29] Nature Reserves in Ireland | National Parks & Wildlife Service (npws.ie)

Table 4-2: Ecological Connectivity and Non-designated Habitats

	Description
Ecological connectivity and networks (including stepping stones and corridors)	Coastal systems, riparian habitats, hedgerow and other blue and green infrastructure networks. Ecological connectivity and networks were a key consideration along with invasive species - particularly those listed on the Third Schedule to the European Communities (Birds and Natural Habitats) Regulations 2011 [S.I.477/2011].
Other sites of high biodiversity value or ecological importance	Semi-natural habitats in National Parks and Wildlife Service (NPWS) national surveys (native woodlands, reef systems, tidal habitats, grasslands, peatlands etc.). Trees and woodlands of national importance have been identified.

The SEA has made use of available data sources including those from the NPWS, the EPA's Framework National Ecological Network for Ireland and CORINE land cover mapping.

The SEA was informed by the findings of the AA and followed elements of Integrated Biodiversity Assessment with reference made to the EPA's 2013 *Integrated Biodiversity Impact Assessment - Streamlining AA, SEA and EIA Processes: Practitioner's Manual*.

As well as considerations related to European sites - a focus was placed on protected species outside of these designations such as bats[30], breeding birds[31], badgers[32] etc. as well as all related species listed within the Flora (Protection) Order, 2022 (S.I. No. 235 of 2022)[33].

[30] The Habitats Directive (1992/43/EEC) and Birds Directive (2009/147/EEC) provides legal protection for habitats and species of European importance. The overall aim of the Habitat and Birds Directives are to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable among them. These two designations are collectively known and referred to as European sites. Articles 6(3) and 6(4) of the Habitats Directives set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning and Development Act 2000 (as amended). Further to the requirements of considerations related to European sites protected Annex IV of the Habitats Directive identifies priority species which are afforded protection in their own right - these include all Irish species of bats. Bats are also protected under the Irish Wildlife Acts, 1976 and 2000.

[31] Irish Wildlife Acts, 1976 (as amended)

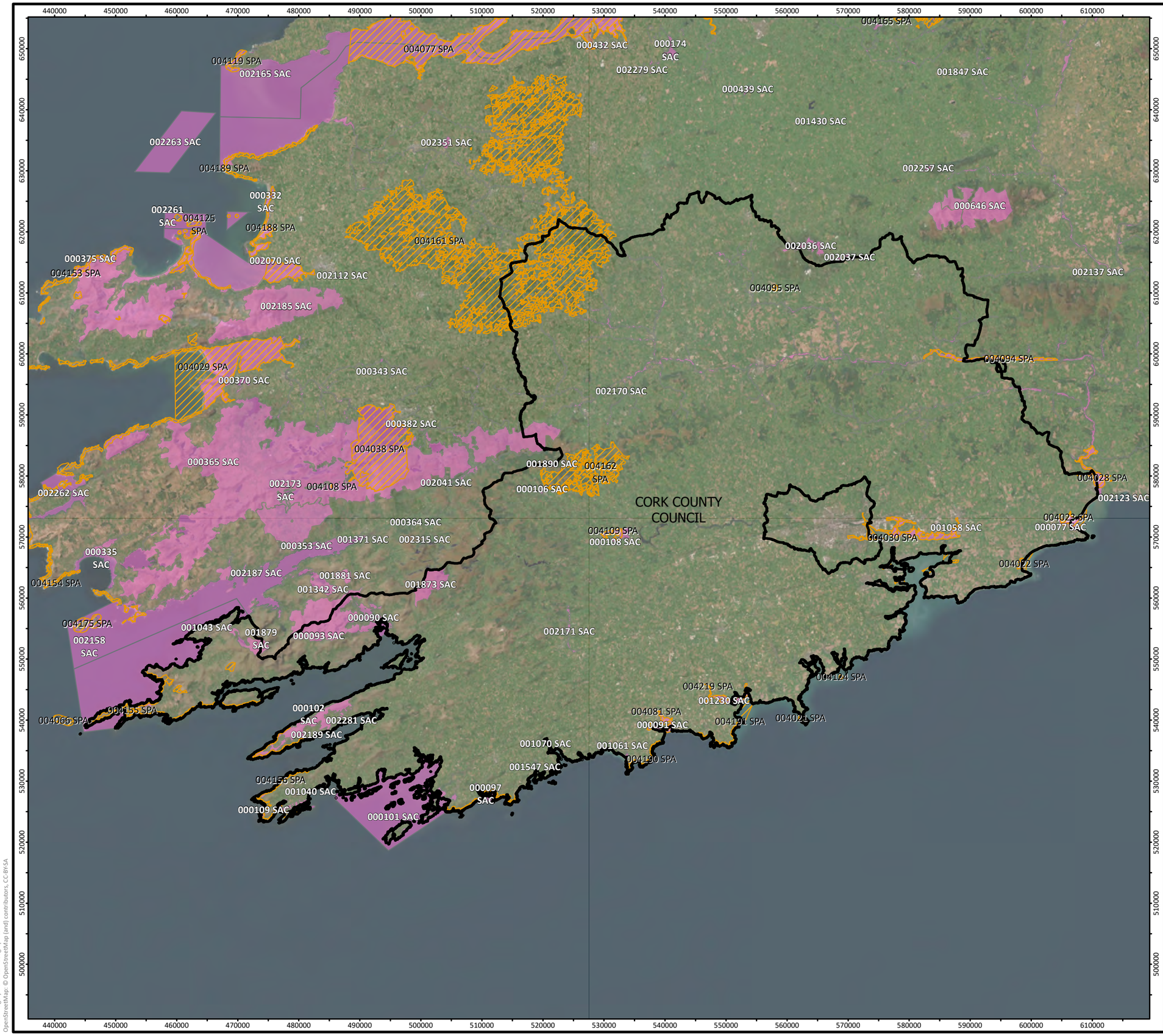
[32] Irish Wildlife Act 1976 (as amended) and Bern Convention Appendix III

[33] Which gives legal protection to 68 species of vascular plants 65 species of bryophytes in the Republic of Ireland (25 liverworts and 40 mosses). The current list of plant species protected by Section 21 of the Wildlife Acts is set out in the Flora (Protection) Order, 1999 (as amended).

4.3.1 Key Issues Related to the Draft LACAP

The key considerations in relation to Biodiversity, Flora and Fauna are as follows:

- Route selection and classification criteria are a key consideration in the development of blueways and greenways within the Draft LACAP due to the largely linear nature of these developments.
- The potential for effects on non-designated biodiversity features e.g. important habitats and species outside designated sites - particularly with regard to fragmentation, barriers to movement and displacement.
- The potential for effects on protected areas: National and European sites (e.g. SAC, SPAs, RAMSAR), National sites (e.g. NHAs) and other Natural Heritage Sites and Conservation Interest Sites e.g. refuge for fauna or flora, wildfowl reserves.
- The potential to spread invasive species.
- The potential for biodiversity enhancement.



Legend

- Local Authority Boundaries
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)

Special Areas of Conservation and Special Protected Areas

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.3
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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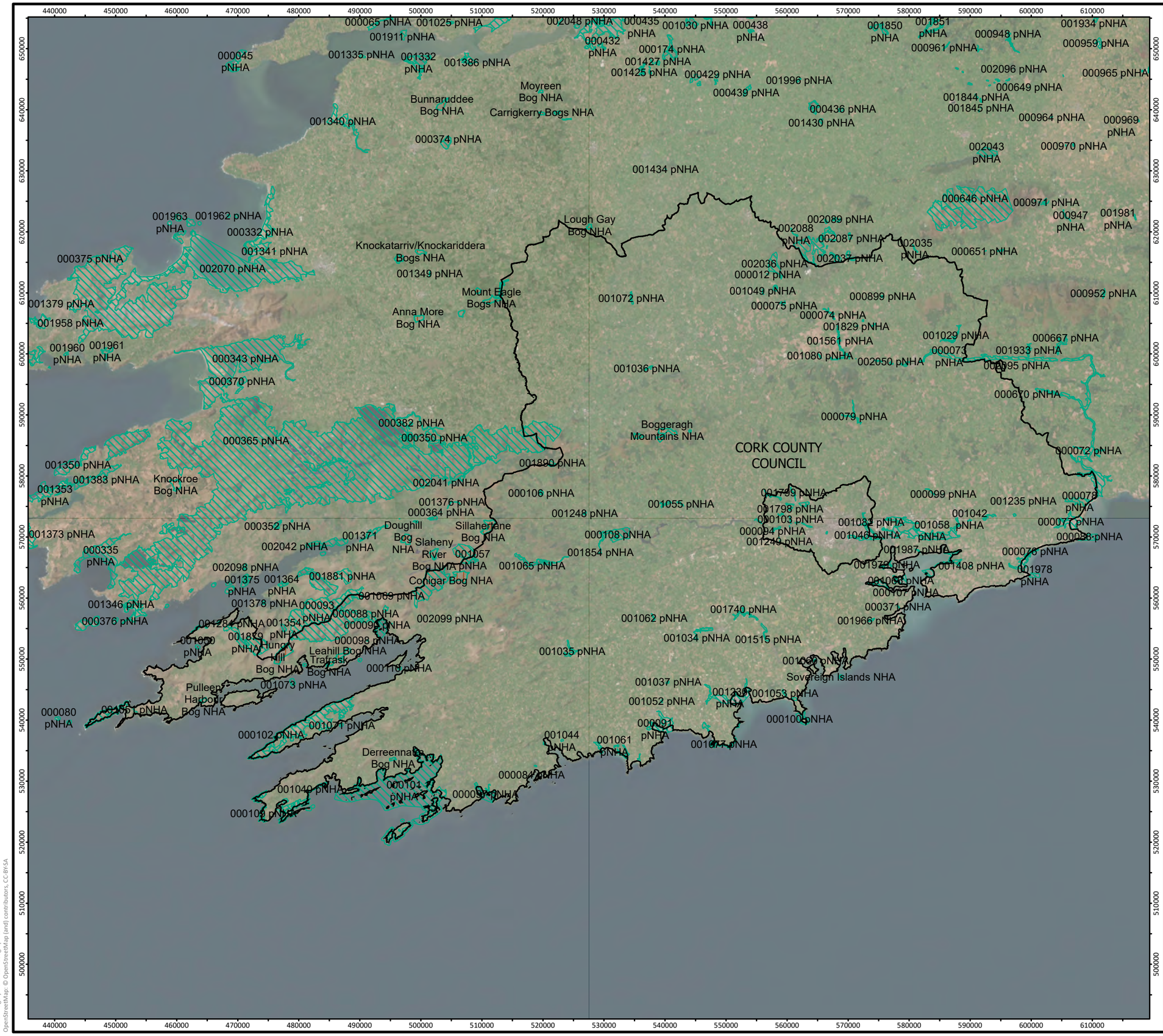

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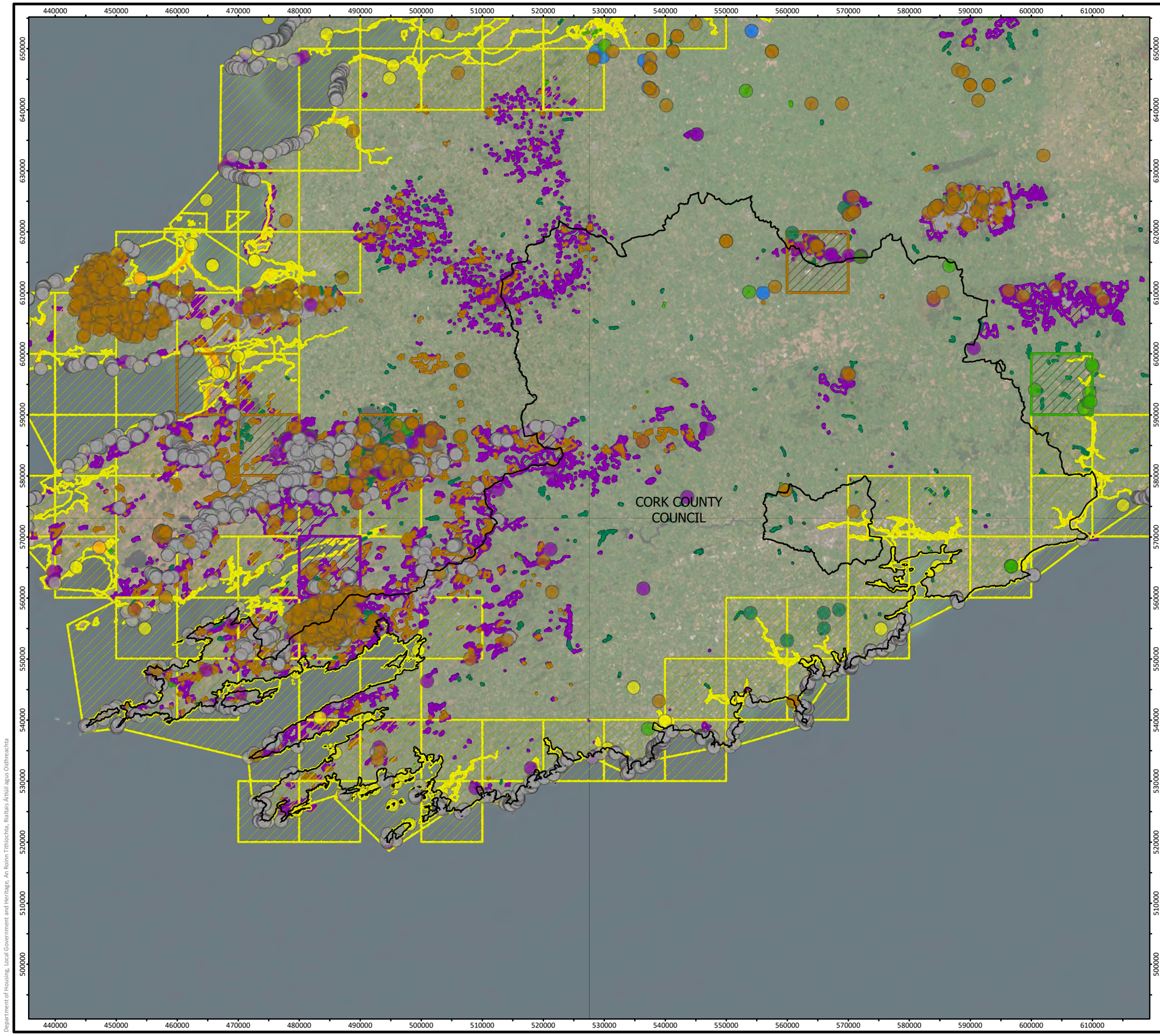

Legend

Local Authority Boundaries

Article17HabitatsDetailedDistributionPointGDPR

- Bogs, Mires and Fens
- Coastal
- Dunes
- Forests
- Freshwater
- Grasslands
- Heath and Scrub
- Rocky

Article17HabitatDetailedDistributionPolylineGDPR

- Coastal

Article17HabitatsDetailedDistributionPolygonGDPR

- Bogs, Mires and Fens
- Coastal
- Dunes
- Forests
- Grasslands
- Heath and Scrub
- Rocky
- Sclerophyllous scrubs

Potential Habitat Sensitivities - Areas likely to contain Annex I habitats

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.5
CLIENT:	CORK COUNTY COUNCIL
DATE: 15/08/2023	**SCALE:** 1:612,500 @ A3

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4.4 Landscape, Seascape and Visual Amenity

The Landscape Character Assessment[34] for County Cork in 2007, including Cork City, divides the County into 16 Landscape Character Types. In addition to this, important views and prospects and scenic routes have been identified. These comprise of:

Table 4-3: Landscape Character Types

Environmental Features	Description
Landscape Character Types (LCTs)	• LCT 1 – City Harbour and Estuary • LCT 2 – Broad Bay Coast • LCT 3 – Indented Estuarine Coast • LCT 4 – Rugged Ridge Peninsulas • LCT 5 – Fertile Plain with Moorland Ridge • LCT 6 – Broad Fertile Lowland Valleys • LCT 7 – Rolling Patchwork Farmland • LCT 8 – Hilly River and Reservoir Valleys • LCT 9 – Broad Marginal Middleground and Lowland Basin • LCT 10 – Fissured Fertile Middleground • LCT 11- Broad Marginal Middleground Valley • LCT 12 – Rolling Marginal and Forested Middleground • LCT 13 – Valleyed Marginal Middleground • LCT 14 – Fissured Marginal and Forested Rolling Upland • LCT 15 – Ridged and Peaked Upland • LCT 16 – Glaciated and Forested Cradle Valley / Glaciated Cradle Valleys

The landscape along the coastline, including Cork Harbour, Carrigtwohill, Midleton, Passage West and Cobh have been identified as having very high landscape sensitivity. Similarly, in northeast Cork, the landscape in the vicinity of the Blackwater valley, including the towns of Mallow, Buttevant, Charleville, Fermoy and Mitchelstown have very high sensitivity. Parts of the landscape near the Lee River Valley have also been identified as having very high sensitivity.

The above and any other or emerging landscape designations were considered by the assessment.

[34] Cork County Development Plan 2022-2028, *Appendix F: Landscape Character Assessment of County Cork*

The SEA assessment of landscape utilised information from the following sources:

- Monaghan environmental sensitivity mapping
- The National Landscape Strategy for Ireland
- Tree Preservation Orders
- Forest cover/Indicative Forest Strategies[35]
- Cork County Development Plan 2022-2028
- County Landscape Character Assessment

4.4.1 Key Issues Relating to the Draft LACAP

The key issues in relation to Landscape, Seascape and Visual Amenity are as follows:

- Effects of green infrastructure (i.e. blueways, greenways) (see also Section 4.9.4) and renewable energy farm developments on areas of designated landscape quality and scenic views etc.
- Sensitivity of the landscape to change from green infrastructure development.

4.5 Cultural Heritage - Archaeological and Architectural

Archaeological sites are legally protected[36]. This section includes information on the archaeological heritage of Monaghan. One of the primary sources of information for known archaeological features is the Record of Monuments and Places (RMP)[37]. The RMP is an inventory of sites and areas of archaeological significance.

There are close to 20,000 Recorded Monuments within the Plan area Monuments span a range of pre-historic eras from the bronze age, iron age, Christian and Medieval periods. There are 58 recorded National monuments on the RMP which are in State Care.

This section also includes information on the architectural heritage of County Cork including that relating to designations such as the Record of Protected Structures (RPS). Local authorities compile and maintain the RPSs[38]; these RPSs are listed in the County Development Plans. For CCC, these RPSs are listed in Volume 2 of the County Development Plan and are available in digital map format in Volume 6. There are over 2,800 entries to the Record of Protected Structures within the Plan area[39], which include bridges, mansions, shop fronts, post offices, gate lodges and buildings dating from the 1500s to the 1990s.

[35] Department of Agriculture, Food and the Marine
[36] National Monuments Acts 1930 (as amended), the National Cultural Institutions Act 1997 (as amended) and the Planning and Development Act 2000 (as amended)
[37] Data available at National Monuments Service - Archaeological Survey of Ireland - Datasets - data.gov.ie
[38] Under Section 51 of the Planning & Development Act 2000 (as amended).
[39] Cork County Development Plan 2022-2028

It is acknowledged that the register of protected structures documented in CDPs may not represent all Ministerial recommended sites/structures which are included in the National Inventory of Architectural Heritage (NIAH)[40]. The purpose of the NIAH is to identify, record, and evaluate the post-1700 heritage of Ireland and there are over 50,000 listings on the NIAH in Ireland (DAHRRG, 2022). These provisions include historic gardens, designed landscapes and underwater archaeological heritage[41].

The Department of Housing, Local Government and Heritage has developed the Heritage Ireland 2030[42] plan, published in February 2022, serving the purpose of informing the decision-making process. An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape designated for its special characteristics and distinctive features. An ACA may or may not include Protected Structures. In an ACA, protection is placed on the external appearance of such areas or structures. There are currently 52 designated ACAs within the Plan area.

The SEA assessment of Cultural Heritage - Archaeological and Architectural has utilised information from the following sources:

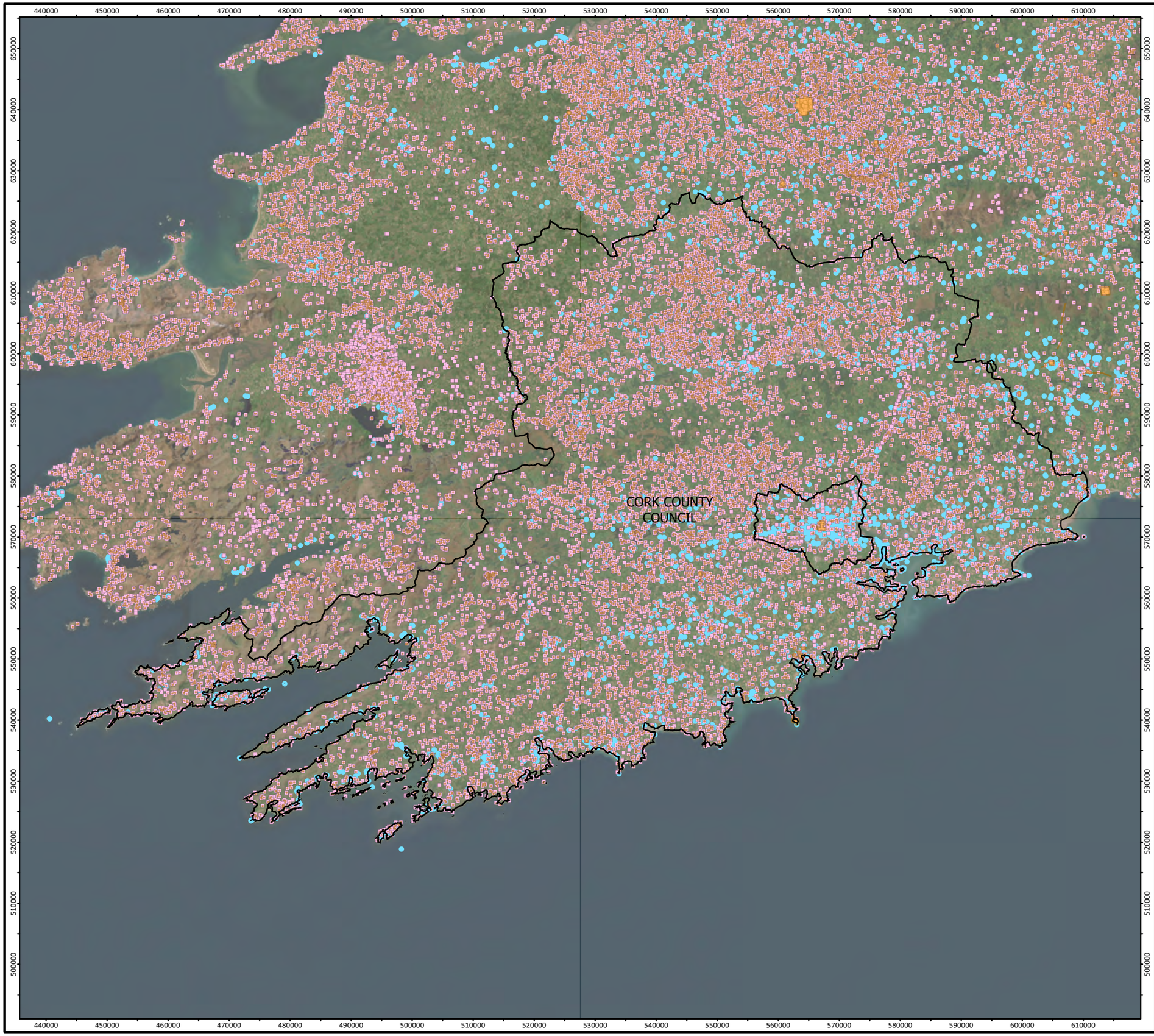
- The Department of Arts, Heritage Regional, Rural and Gaeltacht Affairs[43] (including underwater archaeology such as wreck data[44]).
- National Monuments Service (including the Underwater Unit).
- Built Heritage and Architectural Policy Section (the NIAH)[45].
- Cork County Development Plan 2022-2028.
- Heritage Council.
- United Nations Educational, Scientific and Cultural Organization (UNESCO).

4.5.1 Key Issues Relating to the Draft LACAP

The key issues in relation to Cultural Heritage are as follows:

- The potential impact of the development of green infrastructure on archaeological and architectural heritage.
- No existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

[40] Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999 (as amended) Data available at National Inventory of Architectural Heritage (NIAH) National Dataset - Datasets - data.gov.ie
[41] Department of Housing, Local Government and Heritage. 2015. Advice to the Public on Ireland's Underwater Archaeological Heritage
[42] Available at Heritage Ireland 2030 | gov.ie/housing (www.gov.ie)
[43] Department of Arts, Heritage and the Gaeltacht
[44] Available at Wreck Viewer | National Monuments Service (archaeology.ie)
[45] Data available at National Inventory of Architectural Heritage (NIAH) National Dataset - Datasets - data.gov.ie



Legend

- Local Authority Boundaries
- National Inventory of Architectural Heritage (NIAH)
- National Monuments Service
- SMRZones
- National Monuments Service - Zones of Notification

Archaeological Heritage and National Monuments Map

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.6		
CLIENT:	CORK COUNTY COUNCIL		
DATE:	15/08/2023	**SCALE:**	1:612,500 @ A3

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4.6 Soils

The types of soils found covering the County[46] include the following:

Table 4-4: Soil Types Covering the County

Soil Type	Description
Dominant Soils	
Brown Podzolics	Brown podzolic soils are characterized by dark brown humus-mineral soil covered with a thin mat of partly decayed leaves. **These soils underlie most of the Plan area stretching mainly towards the coastal areas.**
Peaty Podzols	These soils are acidic in nature with a layer of ironpan (intense accumulation of leached iron and commonly located on hill and mountain areas. **These are found mainly in the western parts of the Plan area.**
Other Soils	
Brown Earths / Acid Brown Earths	Brown earths are well drained mineral soils, associated with high levels of natural fertility. **These are found mainly in the north-east of the Plan area. There is also a stretch of these soils across south of Cork City area to Youghal Bay.**
Alluvial soils	These are associated with alluvial (clay, silt or sand) river deposits. **These are found in the flood plains of rivers and streams.**
Gleys	Gleys are soils showing the effects of poor drainage and have developed as a result of permanent or intermittent water logging. This may be due to a high-water table, to a 'perched' water table caused by the impervious nature of the soil itself, or to seepage of runoff from slopes. Most gleys have poor physical conditions, resulting in restricted growth in spring and autumn. **These soils are found mainly within the northern parts of the Plan area.**
Grey-Brown Podzolics	Grey-Brown podzolic soils are characterized by a comparatively thin organic covering and an organic-mineral layer above a grayish brown leached layer. **These are mainly in the northern parts of the Plan area.**
Lithosol soils	Lithosols are shallow non-calcareous soils, commonly overlying hard rock or skeletal and gravelly material. They tend to be stony soils, or with shattered bedrock and are associated with frequent rock outcrops. Their use-range is usually limited to rough grazing. **These soils are mainly in the south-western parts of the Plan area.**
Urban soils	Urban soils are soils which have been disturbed, transported or manipulated by human activity in the urban environment and are often overlain by a non-agricultural, man-made surface layer that has been produced by mixing, filling or by contamination of land surfaces in urban and suburban areas. **These soils are found in the most built-up parts of the Plan area, in towns such as Macroom, Fermoy, and Midleton.**

[46] Teagasc.ie. General Soil Map.

Peatlands are unique systems comprising of peat soil providing as significant carbon stores and supporting a range of unique species. Active blanket bogs and active raised bogs are priority habitats, listed on Annex I of the EU Habitats Directive. Peat soils are often indicative of areas that are the most sensitive to development due to ecological sensitivities and impeded drainage issues. Blanket and basin peats have been identified in the west and north of the Plan area. Outcropping rock is also identified in several upland and coastal locations, predominantly in the West Cork area.

The SEA has examined issues including the loss of soils/soil sealing, because of greenfield development, and interactions with biodiversity and carbon storage, such as those that can occur as a result of development in peatland areas.

There is currently no audit of geological heritage sites for County Cork yet[47]. Previous Landslide Events and Landslide Susceptibility Mapping sources have been considered by the SEA.

The SEA of Soils has utilised information from the following sources:

- Geological Survey Ireland (GSI)
- Teagasc
- Infomar[48]
- EPA

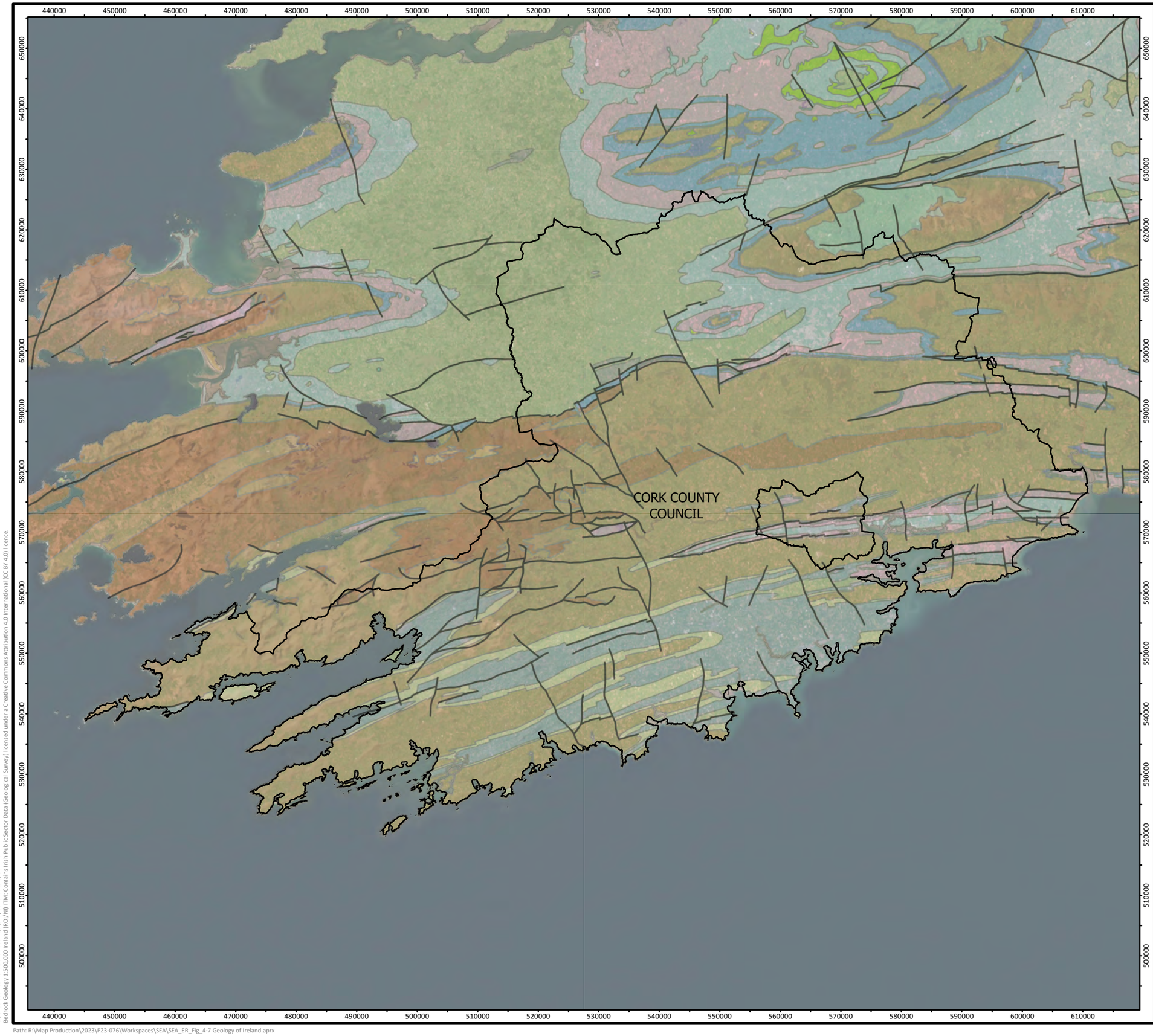
There is no legislation solely directed to soil protection in Ireland. In 2006, the European Commission (EC) developed a Soil Thematic Strategy that aims to protect soils and ensure the sustainable use of soils across Europe. Although a proposal for a Soil Framework Directive was withdrawn in 2014, the importance of sustainable soil management was recognised in the Seventh Environment Action Programme, where sustainable land management is to be achieved by 2020.

4.6.1 Key Issues Relating to the Draft LACAP

The key issues in relation to Soils are as follows:

- Potential for impacts on soil resources and offshore sediment transport.
- Potential impacts to soils (land) vulnerable to erosion.
- Potential for unearthing contaminated material.

[47] Geological heritage (gsi.ie)
[48] Seabed and Sediment Data | Infomar



Legend

Local Authority Boundaries

Bedrock Geology 500k (ROI/NI)

- 35, Deep marine; Slate, schist & minor greywacke
- 43, Shallow marine (Dunquin Group, Dingle); Siltstone, sandstone, tuff, limestone
- 49, Deep marine turbidite sequence; Mudstone, greywacke & conglomerate
- 50, Basalt, andesite, basaltic & andesitic tuff
- 51, Rhyolite & rhyolitic tuff
- 52, Continental redbed facies; Sandstone, siltstone & mudstone (base of Dingle Group is in the Upper Silurian)
- 53, Continental redbed facies; Sandstone, siltstone & mudstone
- 54, Continental redbed facies; Sandstone, conglomerate & siltstone (in places extends into the Carboniferous)
- 55, Shallow marine, (Cork Group, Old Head Sandstone Fm); Sandstone & mudstone
- 56, Basalt, trachyte, syenite & tuff
- 57, Marine (Cork Group) (extends into the Visean); Mudstone, sandstone & thin limestone
- 58, Shallow marine ("Lower Limestone Shale"); Shale, sandstone & thin limestone
- 61, Marine shelf & ramp facies; Argillaceous dark-grey bioclastic limestone, subsidiary shale
- 62, Waulsortian mudbank; Pale-grey massive limestone
- 64, Marine shelf facies; Limestone & calcareous shale
- 71, Fluvio-deltaic & basinal marine (Turbiditic); Shale, sandstone, siltstone & coal
- 72, Fluvio-deltaic & shallow marine; Shale, sandstone & siltstone with coal
- 77, Shallow marine (Upper Cretaceous); Chalk, flint, glauconitic sandstone& chalk breccia

Bedrock Geology

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.7

CLIENT: CORK COUNTY COUNCIL

DATE: 15/08/2023 **SCALE:** 1:612,500 @ A3

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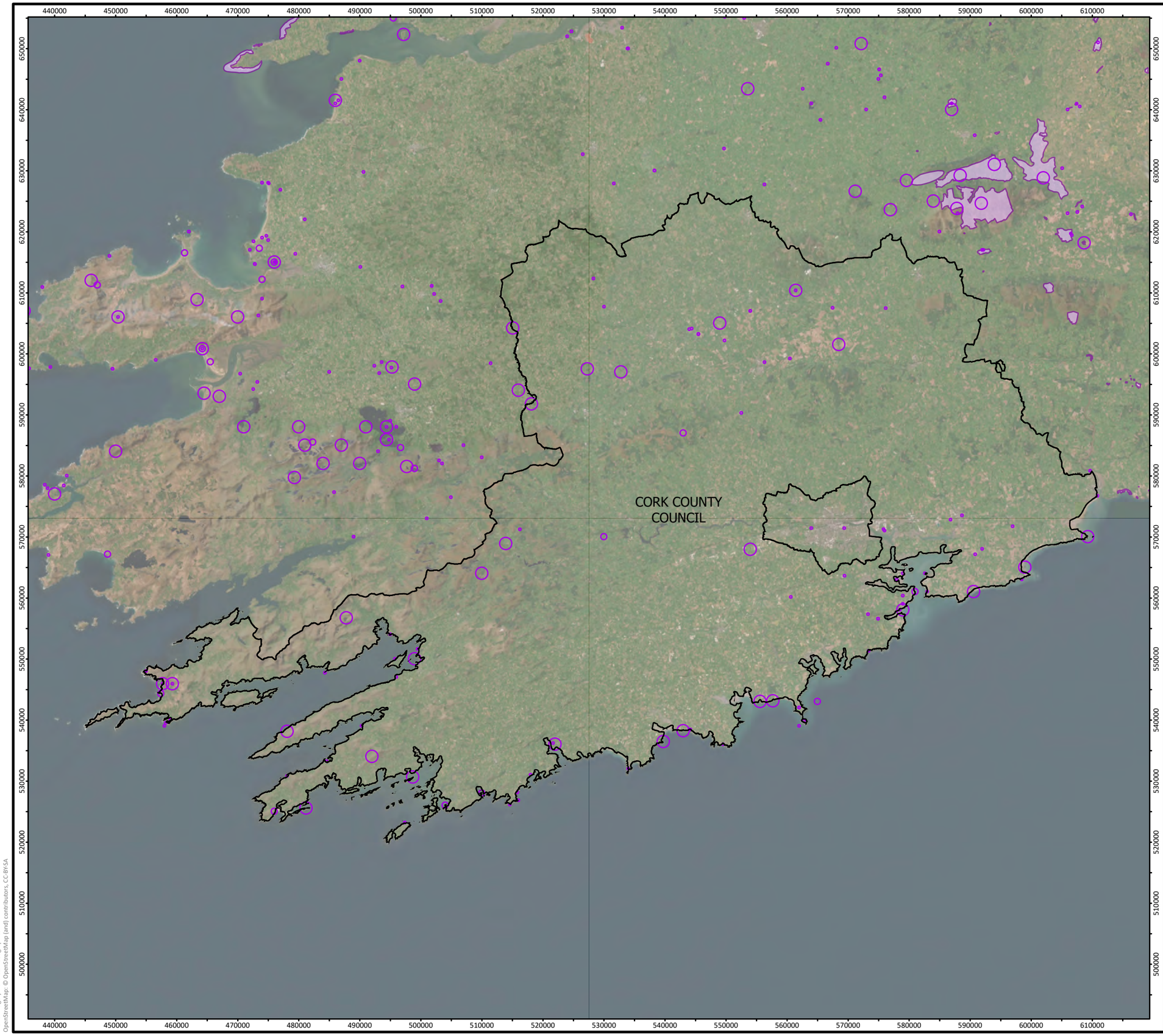

Legend

- Local Authority Boundaries
- Geological Heritage Sites (Audited Boundaries)
- Geological Heritage Sites (Unaudited Boundaries)

Geological Heritage Sites

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.8
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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4.7 Land Use

Information on land use in County Cork has been obtained from the CORINE Land Cover (CLC) inventory and Ireland's Marine Atlas[49]. These data sources have archives which document land use change as well as existing land use.

The CORINE database is the dominant land use database; however, some sectors have additional spatial data resources such as forestry. The Forestry Service have produced a GIS based Forest Inventory Planning System (FIPS) to act as an aid in the long-term spatial planning of national forest, and to provide guidance to forestry grants. Additional sources of further land use data include the NPWS[50].

The SEA process has considered land use impacts - utilising data from sources such as:

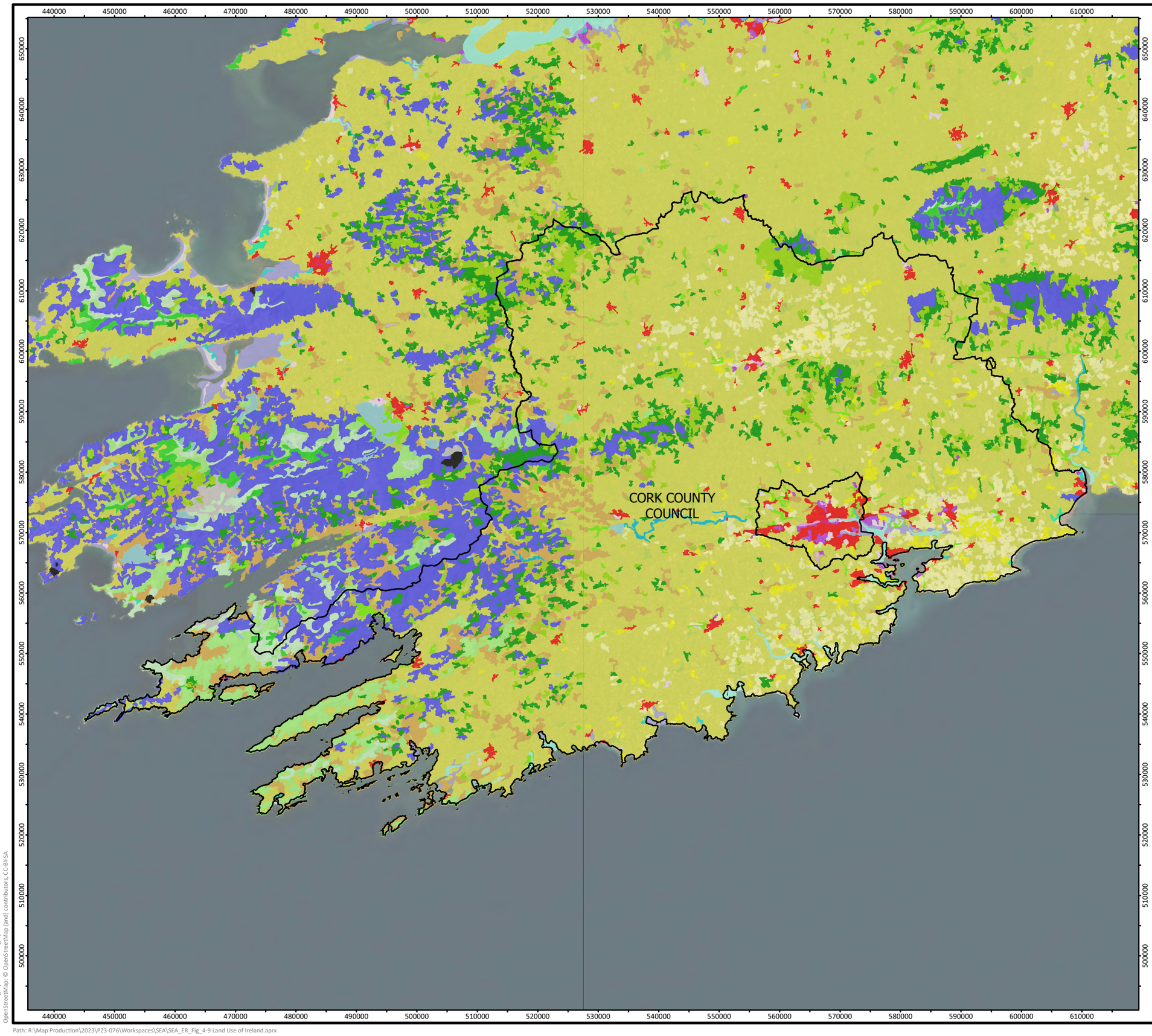
- CORINE Land Cover Database
- Teagasc
- EPA
- NPWS
- Forest Service
- Marine Institute
- Sea Fisheries Protection Authority (SFPA)
- GSI data

4.7.1 Key Issues Relating to the Draft LACAP

The key issues in relation to land use are as follows:

- Potential constraints on sea fisheries, both during construction and operation of infrastructure projects (i.e. onshore and offshore wind farms) associated with the Draft LACAP.
- Potential constraints on other sectors such as agricultural, forestry and fisheries, primarily related to construction and operation of infrastructure projects (i.e. solar farms, blueways) associated with the Draft LACAP.

[49] Available at Ireland's Marine Atlas
[50] Sources such as the Lesser Horseshoe Bat Species Action Plan 2022-2026, Draft National Peatland Strategy, Draft Raised Bog SAC Management Plan, and Draft Raised Bog NHAs Review.



Legend

- Local Authority Boundaries

CORINE Land Cover 2018

- 111 Continuous urban fabric
- 112 Discontinuous urban fabric
- 121 Industrial or commercial units
- 122 Road and rail networks
- 123 Sea ports
- 124 Airports
- 131 Mineral extraction sites
- 132 Dump
- 133 Construction sites
- 141 Green urban sites
- 142 Sport and leisure facilities
- 211 Non-irrigated land
- 231 Pastures
- 242 Complex cultivation patterns
- 243 Land principally occupied by agriculture with areas of natural vegetation
- 311 Broad-leaved forest
- 312 Coniferous forest
- 313 Mixed forest
- 321 Natural grassland
- 322 Moors and heaths
- 324 Transitional woodland scrub
- 331 Beaches dunes sand
- 332 Bare rocks
- 333 Sparsely vegetated areas
- 334 Burnt areas

Land Use (CORINE)

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.9

CLIENT: CORK COUNTY COUNCIL

DATE: 15/08/2023 **SCALE:** 1:612,500 @ A3

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4.8 Air Quality and Noise

The Air Quality in Ireland 2021 report prepared by the EPA identifies that:

- Air quality in Ireland is generally good, however, there are concerning localised issues that are negatively impacting the air we breathe.
- Air quality monitoring results in 2021 show that fine particulate matter ($PM_{2.5}$) mainly from burning solid fuels in our homes, and nitrogen dioxide (NO_2) mainly from road transport, remain the main threats to good air quality.
- EPA monitoring shows that fine particulate matter ($PM_{2.5}$) and nitrogen dioxide (NO_2) levels are within the current EU legal limits, however these pollutants exceed the World Health Organisation (WHO) (2021) guidelines[51].

The National Clean Air Strategy (DECC, 2023) referred to the most recent projections by the EPA in 2022 and states that Ireland is on track to meet the majority of EU commitments for national emissions levels by 2030, and there was only one exceedance of EU ambient air quality limit values since 2010.

Under the Clean Air for Europe Directive [Directive 2008/50/EC], EU member states must designate "Zones" for the purpose of managing air quality. For Ireland, four zones were defined in the Air Quality Standards Regulations (2011). The rural areas within County Cork are defined as 'Zone D'. Some areas defined as 'Zone B' as part of the Cork conurbation fall into the boundary of the County Council. The current air quality in the County is generally identified by the EPA as being of *Good*[52] status.

The EEA[53] states that "*environmental noise can be defined as unwanted or harmful outdoor sound*". The EU Noise Directive (2002/49/EC) relates to the assessment and management of environmental noise[54]. This Directive called for the development of strategic noise maps and action plans for major roads, railways, airports and cities. Existing noise related impacts can be seen in Figure 4-10; these were considered throughout the SEA and AA processes in the development of the Draft LACAP.

The SEA has considered Air Quality and Noise using data from the following sources:

- EPA
- WHO

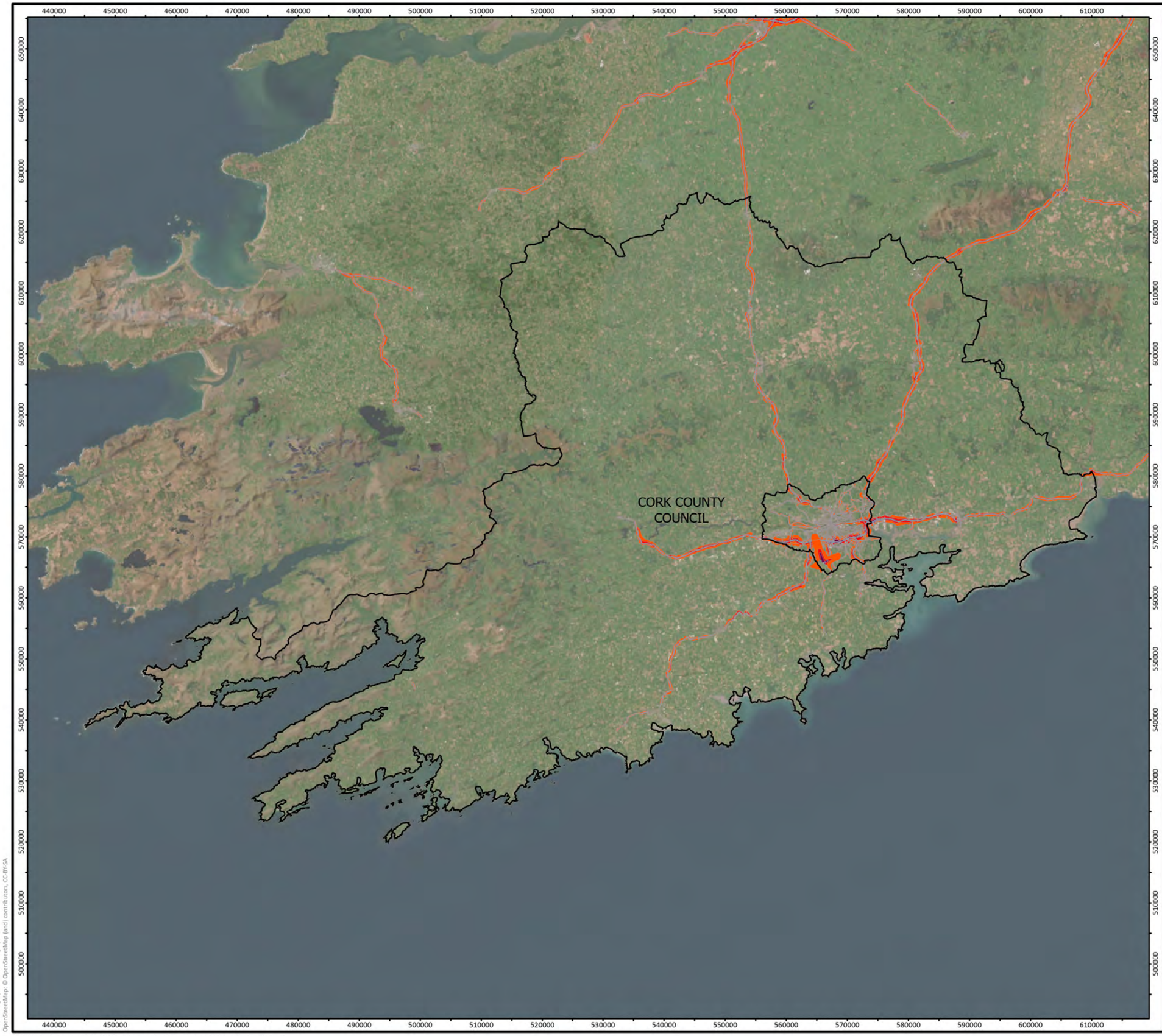
4.8.1 Key Issues Relating to the Draft LACAP

Overall, the LACAP is likely to have positive effects on air quality due to the nature of the plan; however, there are potential issues which may arise due to the implementation.

[51] World Health Organization. 2021.WHO global air quality guidelines: particulate matter (PM2.5 and PM10), ozone, nitrogen dioxide, sulphur dioxide and carbon monoxide. World Health Organization. https://apps.who.int/iris/handle/10665/345329. License: CC BY-NC-SA 3.0 IGO
[52] EPA AirQuality.ie - 26/07/2023
[53] EEA. 2022. Noise Data Briefing. Available at: Noise — European Environment Agency (europa.eu).
[54] This was transposed into Irish national legislation via the Environmental Noise Regulations (S. I. No. 140 of 2006).

The key issues in relation to Air Quality and Noise are as follows:

- Blueway developments, particularly during the construction phase, may have a temporary negative impact on air quality and create noise pollution.
- Wind farm developments may have impacts on noise pollution, particularly towards sensitive receptors which are in close proximity.



Legend

Local Authority Boundaries

Noise Round 3 Rail - Lden
- 55-59dB
- 60-64dB
- 65-69dB
- 70-74dB
- Greater than 75dB

Noise Round 3 Road - Lden
- 55-59dB
- 60-64dB
- 65-69dB
- 70-74dB
- Greater than 75dB

Noise Round 3 Airport - Lden
- 55-59dB
- 60-64dB
- 65-69dB
- 70-74dB
- Greater than 75dB

Noise Mapping Lden (Day, Evening, Night; a measurement over 24 hours)

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.10
CLIENT:	CORK COUNTY COUNCIL
DATE: 29/08/2023	**SCALE:** 1:612,500 @ A3

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4.9 Water

The EU Water Framework Directive (WFD) (2000/60/EC) establishes a framework for the protection of both surface and groundwater. Transposing legislation outlines the water protection and water management measures required in Ireland to maintain high status of waters where it exists and to prevent any deterioration in existing water status. The second cycle of the River Basin Management Plan (RBMP) ran from 2018-2021, where separate plans were devised for all eight River Basin Districts (RBDs) with the objective of achieving at least 'good' status for all waters by 2027. The next RBMP 2022-2027 is currently in draft and is likely to be published before the completion of the SEA process for the Draft LACAP.

Water quality data is collected by the EPA[55]. The County is located mainly within the Bandon-Ilen, Lee, Cork Harbour and Youghal Bay, and Blackwater (Munster) WFD catchments. The Western Celtic Sea lies along the southern coast of the County. The WFD status of coastal water bodies (2016-2021) identifies 14 coastal waterbodies, namely the Western Celtic Sea, Dunmanus Bay, Outer Bantry Bay and Southwestern Atlantic Seaboard as being of *High* status, the Outer Kenmare River, Roaring Water Bay, Rosscarbery Bay, Clonakilty Bay, Courtmacsherry Bay, Kinsale Harbour and Ballycotton Bay as of *Good* status, and the Youghal Bay, Cork Harbour and Outer Cork Harbour as of *Moderate* status.

The EU Groundwater Directive (2006/118/EC) uses a holistic approach to groundwater by addressing the relationships between groundwater, surface water and ecological receptors. Groundwater is considered by its ecological status, which is based on two assessments: chemical and quantitative status. Both of these need to be in good condition for the overall water body to be classified as good.

The WFD groundwater status (2016-2021) underlying County Cork is generally identified as being of *Good* status, except for an area containing an industrial facility in Mitchelstown which is of *Poor* status.

The WFD status of the major networks of rivers and streams (2016-2021) draining County Cork ranges from high (sections of rivers and streams, including Mealagh, Ilen, Glengarriff, Coomhola, Lee (Cork), Dripsey, Laney, Sullane, Glen (Banteer), and Shournagh), to good (sections of rivers and streams, including Bandon, Owenkeagh, Argideen, Ilen, Toon, Lee (Cork), Sullane, Owentaraglin, Rathcoole, Blackwater (Munster), Funshion, and Bride (Blackwater)), to moderate (sections of rivers and streams including: Awbeg (Buttevant), Deel (Newcastle), Bandon, Roury, Ownahinchy, Clonakilty Stream, Glan Stream, Owenboy (Cork), Allow, and Womanagh) and to poor (sections of rivers and streams including: Awbeg (Buttevant), Gradoge, Flesk (Bride), and Dungourney).

Numerous lake waterbodies ae scattered across the Plan area. The most notable and sizeable lakes have varying WFD 2016-2021 statuses; these are Inniscarra Reservoir (good), Carrigdrohid Reservoir and Lough Abisdealy (moderate), and Lough Allua (poor). Other lakes within the County boundary do not have assigned WFD statuses.

Pressures on waterbodies that are failing to meet the WFD's overall objective of 'good' status has been identified by the SEA. This section provides information on aquifer vulnerability, aquifer productivity and entries to the WFD's Registers of Protected Areas.

Certain areas across the County are at risk of flooding from various sources including fluvial, estuarial and coastal. County Cork is located on the south coast of Ireland. Much of the coastline boundary consist of high lands, but low-lying areas such as Cork Harbour, Youghal Harbour and Lower Bandon Estuary are subject to flood risk from the Celtic Sea. There are also various historic and predictive indicators of flood risk in the County, especially from river channels like Blackwater, Finnow, Awbeg and Bandon, and lakes like Allua.

[55] EPA Maps. Water.

The OPW is the lead agency tasked with the management of flood risk in the Republic of Ireland. In 2022, the OPW reviewed their 2016 Flood Risk Management Plans (FRMP). The purpose of each FRMP is to outline the long-term strategy to manage flood risk in Ireland. A total of 40 settlements were identified by the OPW in 2012 as requiring detailed assessment of flood risk (Areas for Further Assessment)[56].

A Strategic Flood Risk Assessment (SFRA), as required by 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (Department of the Environment, Heritage and Local Government and Office of Public Works, 2009) and Circular PL 2/2014 (Department of Environment, Community and Local Government), has been undertaken alongside the preparation of the SEA and the preparation of the Draft LACAP. The SFRA focuses on land use zoning provided for by the County Development Plan as well as County-wide flood risk management policy. The SFRA has considered available and emerging information on flood risk indicators, including the OPW's Flood Hazard and Risk Mapping and any flood defences and inter-County interactions.

The GSI rates groundwaters according to both their productivity and vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter into groundwater. The vulnerability of aquifers underlying the County are mapped on Figure 4-15. The GSI also rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. This is referred to as aquifer productivity and is mapped on Figure 4-16.

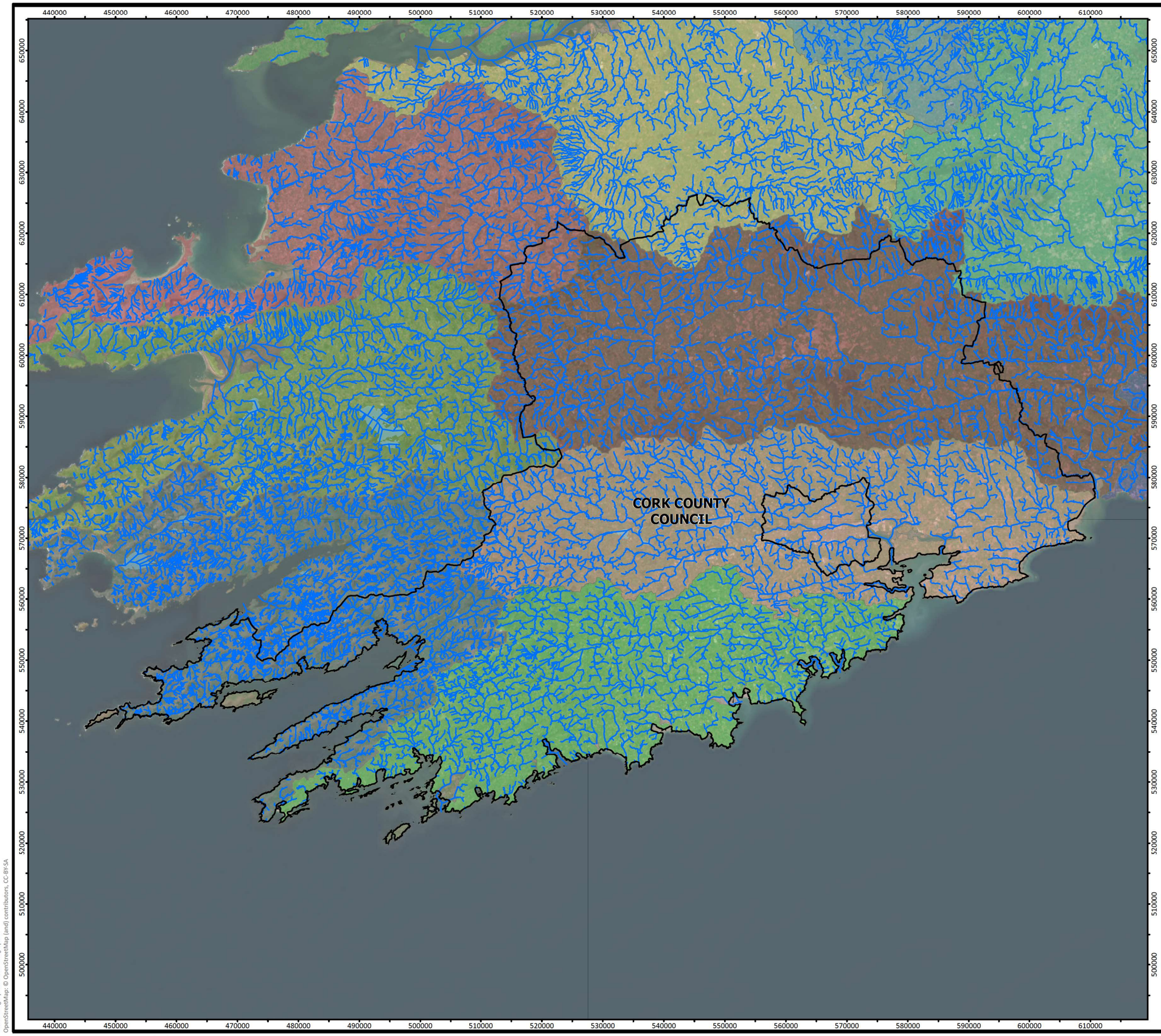
The Water assessment has utilised information from the following sources:

- EPA and Marine Institute - WFD Data.
- GSI data on groundwaters, aquifers and bedrock information.
- Catchment Flood Risk Assessment and Management (CFRAM) Study and associated FRMPs (OPW, as reviewed 2022).
- Flood Risk Assessment (FRA) Mapping[57] (OPW).

4.9.1 Key Issues Relating to the Draft LACAP

- Potential pressures and impacts on water body status from the construction of renewable energy and blueway projects i.e. increased sedimentation, groundwater recharge and accidental spillages.

[56] Available online at Microsoft Word - PFRA Main Report - Rev D.doc.
[57] OPW (2022) Flood risk maps and data platform - Available at https://www.floodinfo.ie/map/floodmaps/



Legend

- Local Authority Boundaries
- Rivers

WFD Catchments

Catchment Name

- Bandon-Ilen
- Blackwater (Munster)
- Colligan-Mahon
- Dunmanus-Bantry-Kenmare
- Laune-Maine-Dingle Bay
- Lee, Cork Harbour and Youghal Bay
- Lower Shannon
- Shannon Estuary North
- Shannon Estuary South
- Suir
- Tralee Bay-Feale

Hydrology

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.11
CLIENT:	CORK COUNTY COUNCIL
DATE: 15/08/2023	**SCALE:** 1:612,500 @ A3

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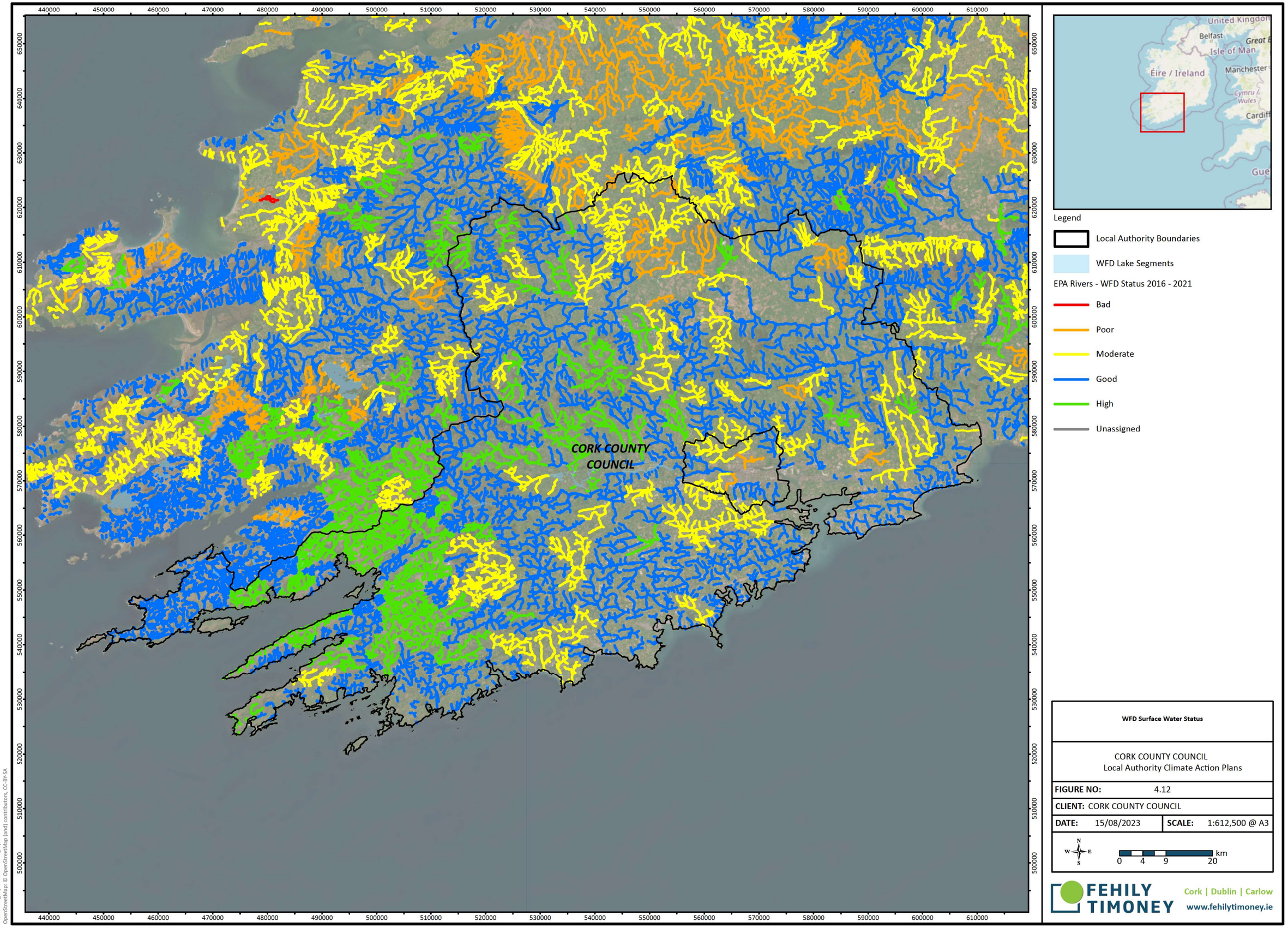

WFD Surface Water Status

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.12
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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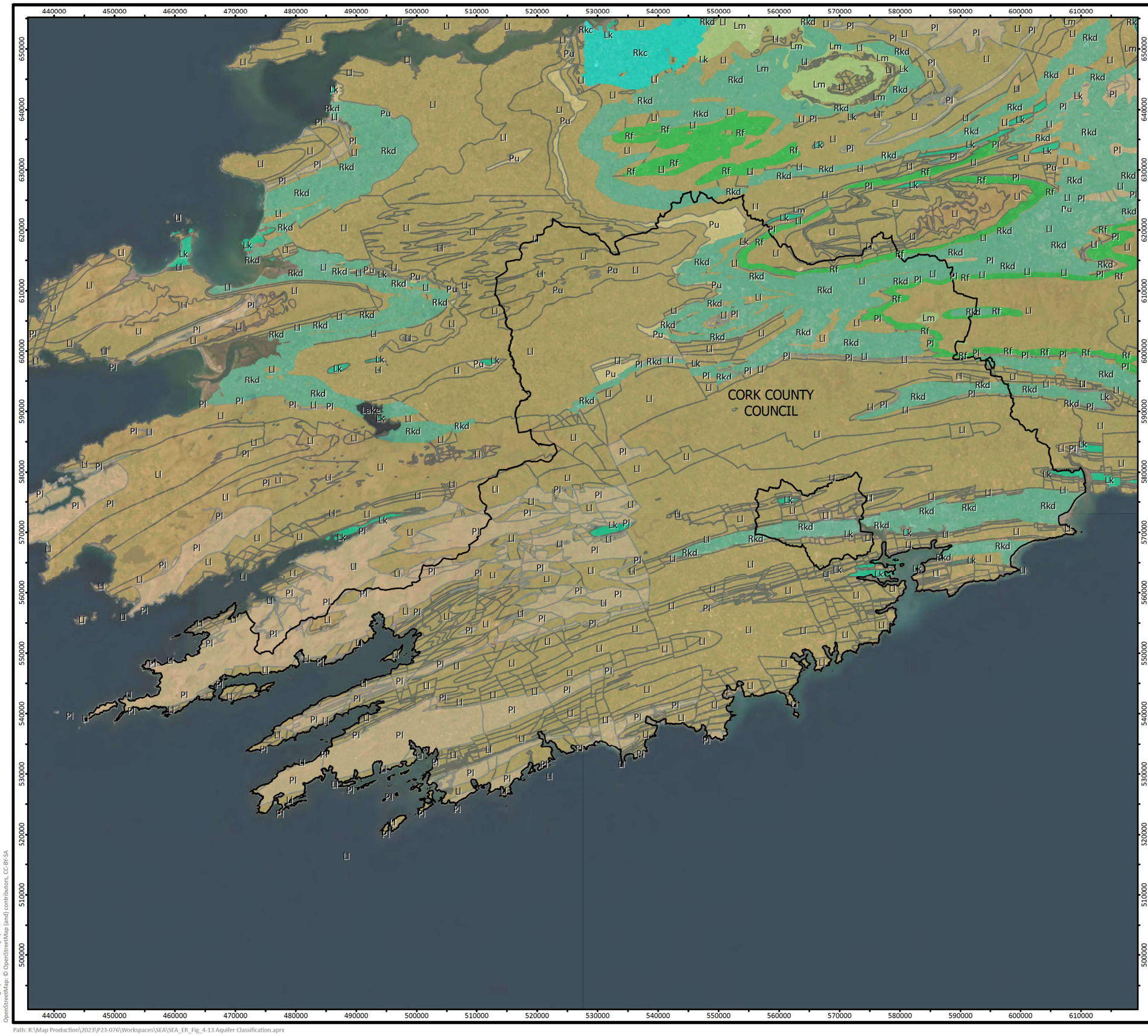

Legend

- Local Authority Boundaries

Bedrock Aquifers

- Lk: Locally Important Aquifer - Karstified
- Ll: Locally Important Aquifer - Bedrock Mod Productive Locally
- Lm: Locally Important Aquifer - Bedrock Generally Mod Productive
- Pl: Poor Aquifer Bedrock Generally Unproductive Except Locally
- Pu: Poor Aquifer Bedrock Generally Unproductive
- Rf: Regionally Important Aquifer - Fissured Bedrock
- Rk: Regionally Important Aquifer - Karstified
- Rkc: Regionally Important Aquifer - Karstified (conduit)

Aquifer Classification

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.13
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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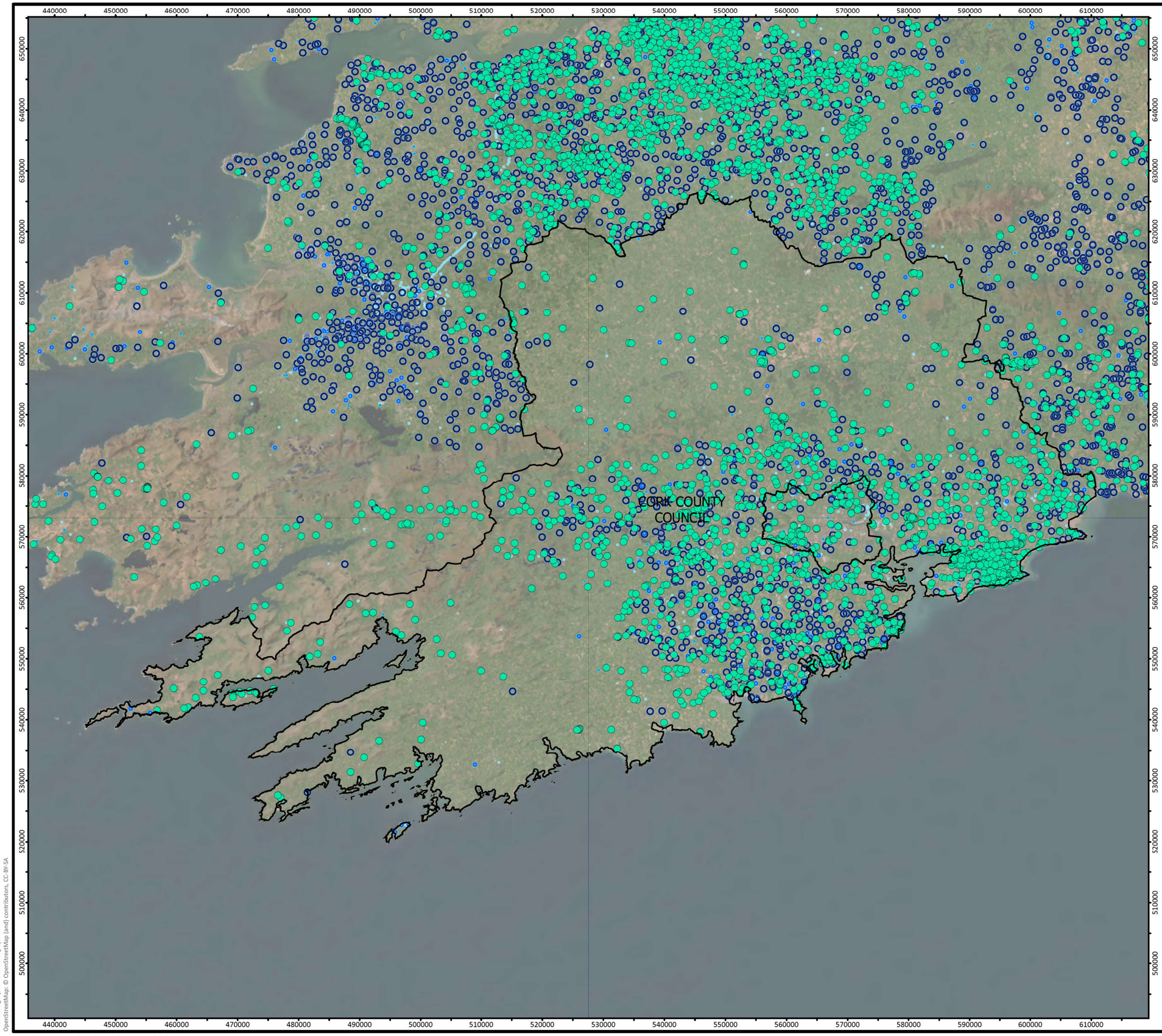

Legend

- Local Authority Boundaries
- Wells and Springs (10-50m Accuracy)
- Wells and Springs (50-100m Accuracy)
- Wells and Springs (100-200m Accuracy)
- Wells and Springs (200-500m Accuracy)
- Wells and Springs (500m-1km Accuracy)

Wells and Springs

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.14		
CLIENT:	CORK COUNTY COUNCIL		
DATE:	15/08/2023	**SCALE:**	1:612,500 @ A3

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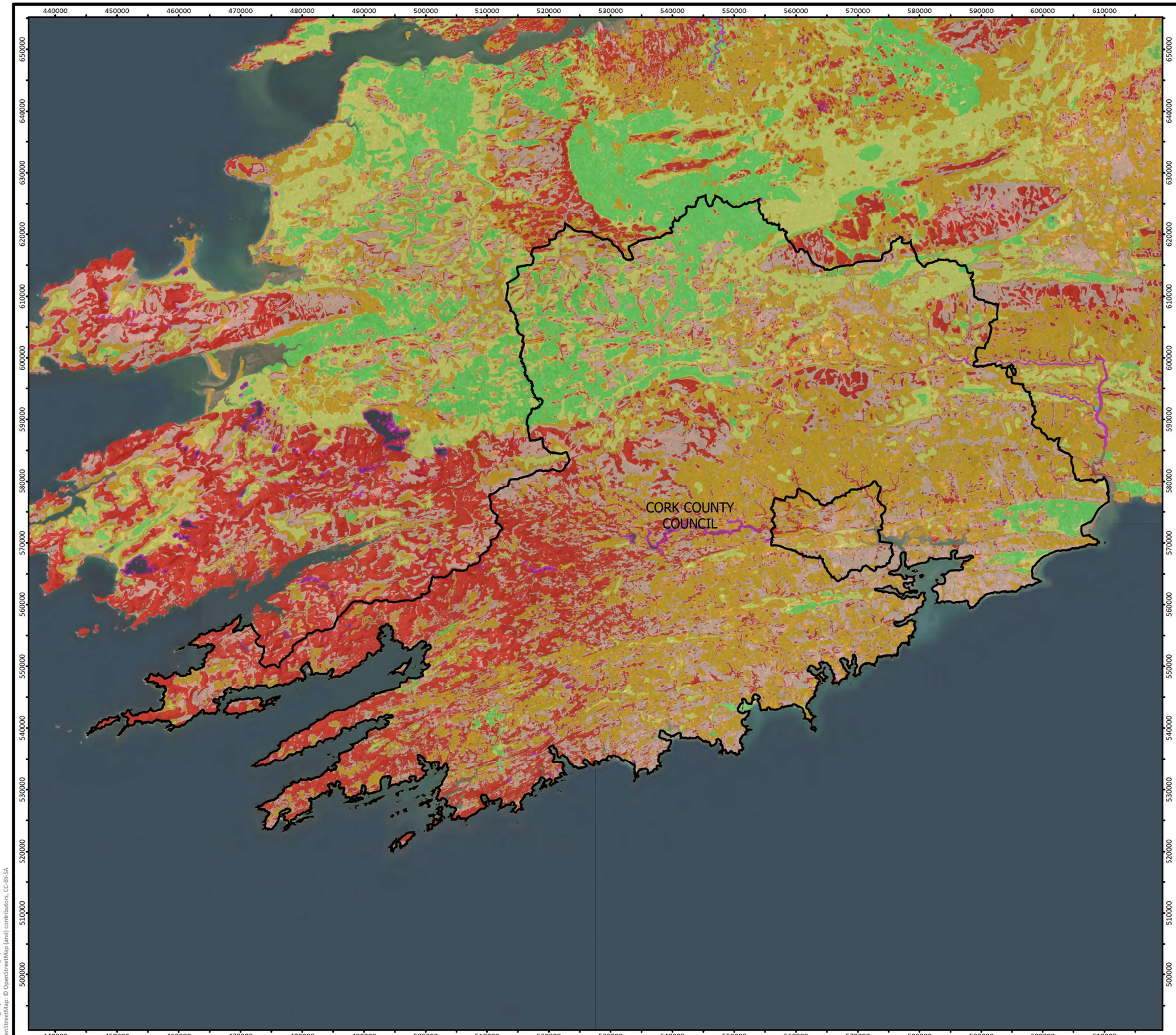

Legend

- Local Authority Boundaries

Groundwater Vulnerability

- E - Extreme
- H - High
- M - Moderate
- L - Low
- Water
- X - Rock Near Surface or Karst

Groundwater Vulnerability

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.15
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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CORK COUNTY COUNCIL

Legend

Local Authority Boundaries

Bedrock Aquifers

Ll: Locally Important Aquifer - Bedrock Mod Productive Locally

Lm: Locally Important Aquifer - Bedrock Generally Mod Productive

Pu: Poor Aquifer Bedrock Generally Unproductive

Groundwater Productivity

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.16
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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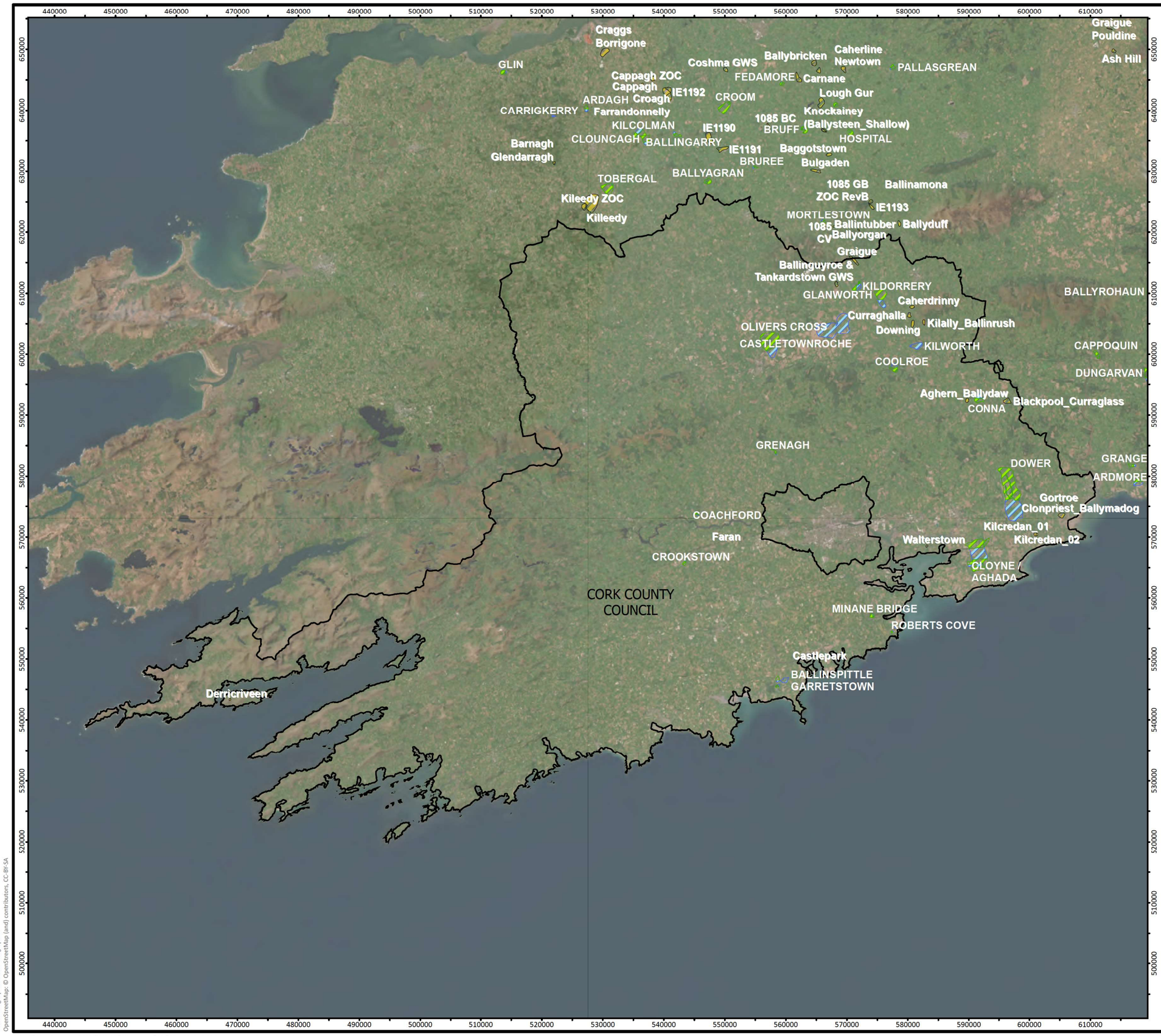

Legend

- Local Authority Boundaries

GSI Source Protection Areas

- Source Protection Area (Inner)
- Source Protection Area (Outer)
- Group Scheme Preliminary Source Protection Areas

Drinking-water Source Protection Areas

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.17
CLIENT:	CORK COUNTY COUNCIL
DATE:	15/08/2023
SCALE:	1:612,500 @ A3

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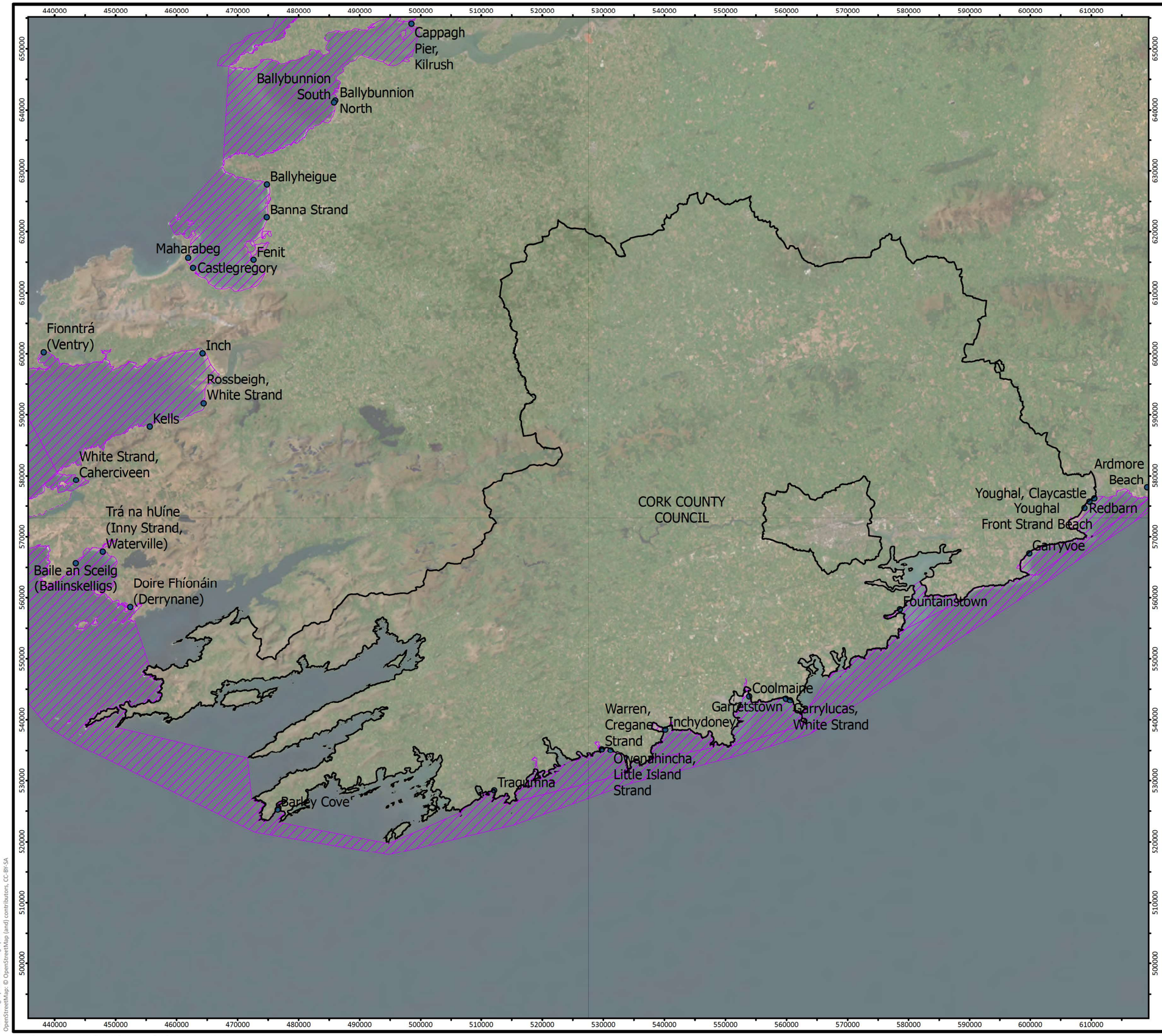

Legend

- Local Authority Boundaries
- WFD Bathing Water Areas Polygon Features - graphic representation of beach only
- WFD Surface Water Polygons that intersect with BATH_BathingLocations Point Feature dataset
- Designated Bathing Water Locations Point Features (Officialy Designated Beach)

WFD Register of Protected Areas
-
Bathing Water Areas

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO:	4.18a
CLIENT:	CORK COUNTY COUNCIL
DATE: 16/08/2023	**SCALE:** 1:612,500 @ A3

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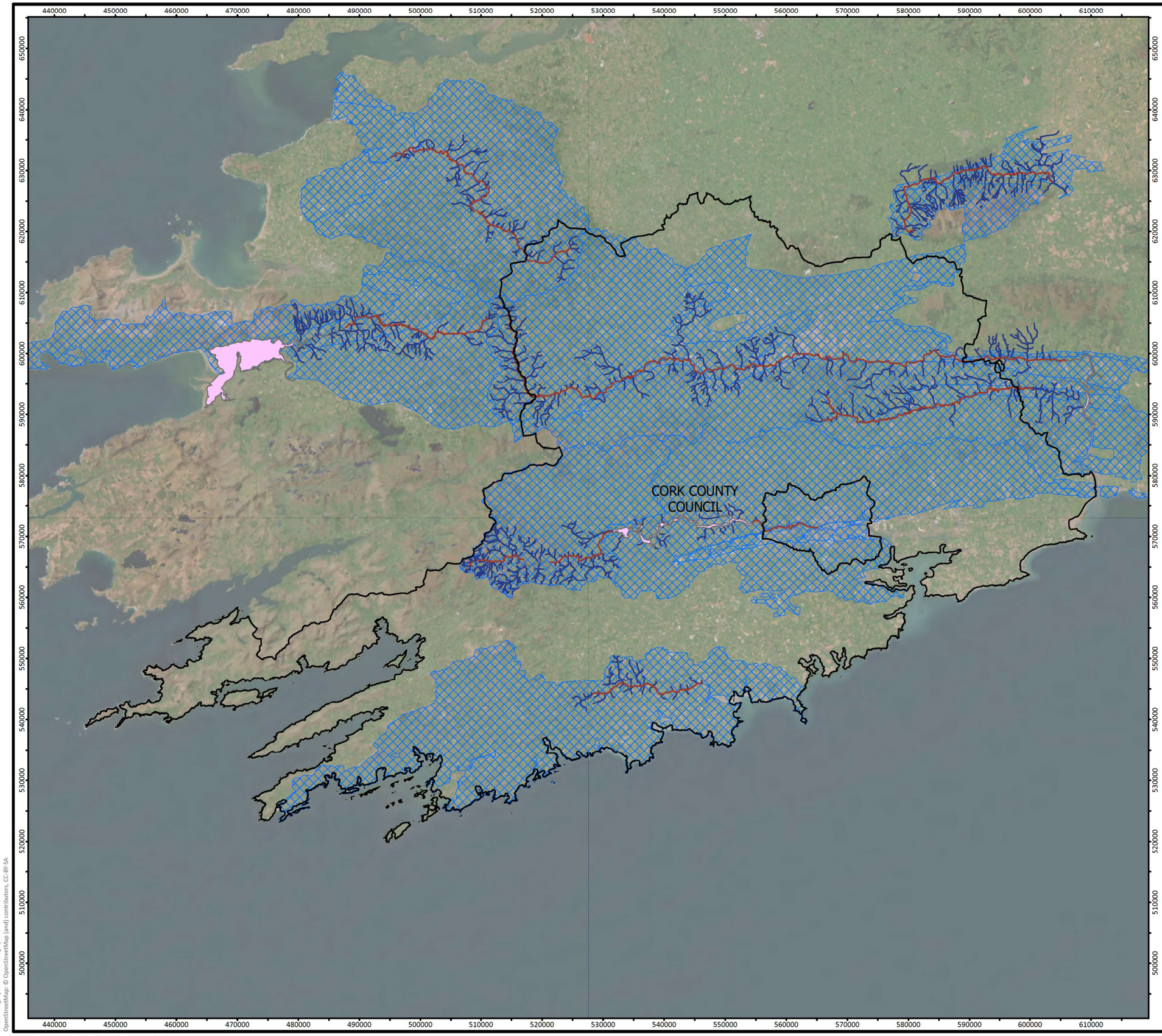

Legend

- Local Authority Boundaries
- Officially designated under S.I. 293/1988
- WFD Groundwater Bodies that intersect with Designated Salmonid Waters
- WFD Groundwater Bodies that intersect with Designated Salmonid Waters
- WFD Surface Water Polygons that intersect with Designated Salmonid Waters (Lake, Coastal and Transitional Water Bodies)

WFD Register of Protected Areas
-
Salmonid

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.18b

CLIENT: CORK COUNTY COUNCIL

DATE: 16/08/2023 **SCALE:** 1:612,500 @ A3

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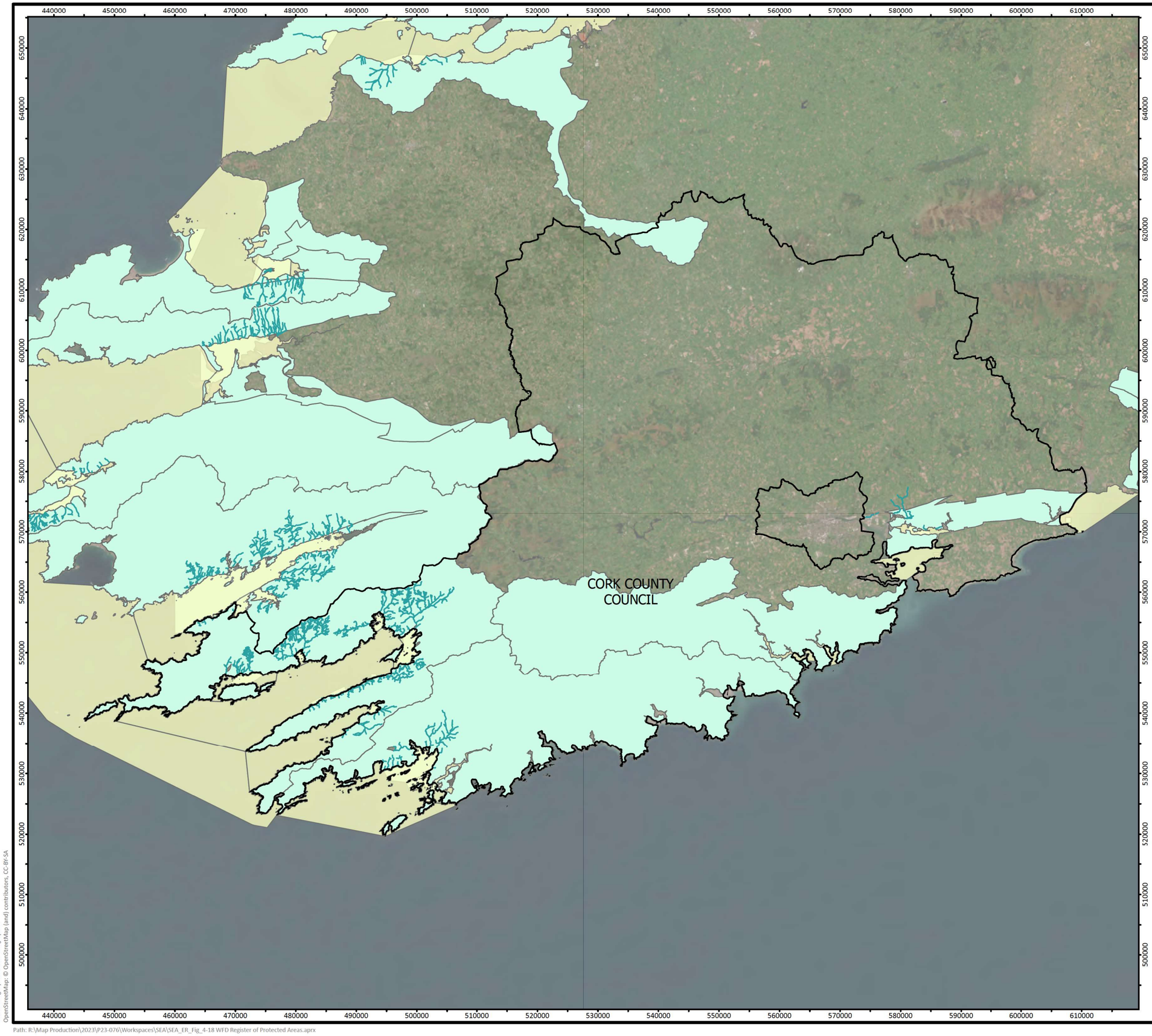

Legend

- Local Authority Boundaries
- WFD Riverwater Bodies that intersect with WFD_RPA_Shellfish
- WFD Surface Water Polygons that intersect with WFD_RPA_Shellfish
- WFD Groundwater Bodies that intersect with WFD_RPA_Shellfish
- Designated Shellfish Area

WFD Register of Protected Areas
-
Shellfish Areas

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.18c

CLIENT: CORK COUNTY COUNCIL

DATE: 16/08/2023 **SCALE:** 1:612,500 @ A3

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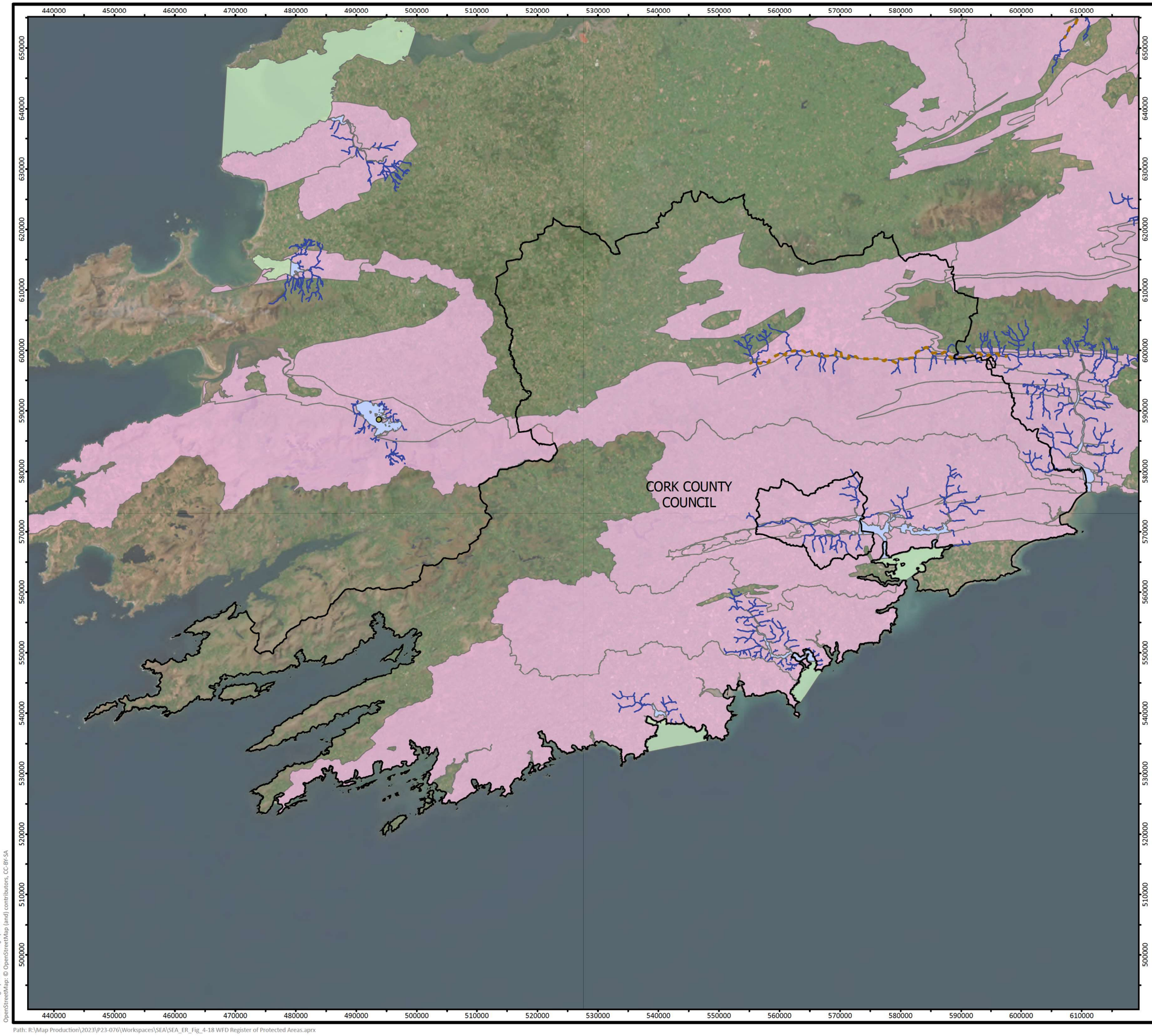

Legend

- Local Authority Boundaries
- Designated Nutrient Sensitive Points
- WFD Riverwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
- Designated Nutrient Sensitive WFD_RiverwaterBodies
- WFD Surface Water Polygons that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons) (Lake, Coastal and Transitional Water Bodies)
- WFD Groundwater Bodies that intersect with Designated Nutrient Sensitive Areas (Pts, Polyline or Polygons)
- Designated Surface Water Nutrient Sensitive Areas

WFD Register of Protected Areas
-
Nutrient Sensitive Areas

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.18d

CLIENT: CORK COUNTY COUNCIL

DATE: 16/08/2023 **SCALE:** 1:612,500 @ A3

N W E S 0 4 9 20 km

FEHILY TIMONEY
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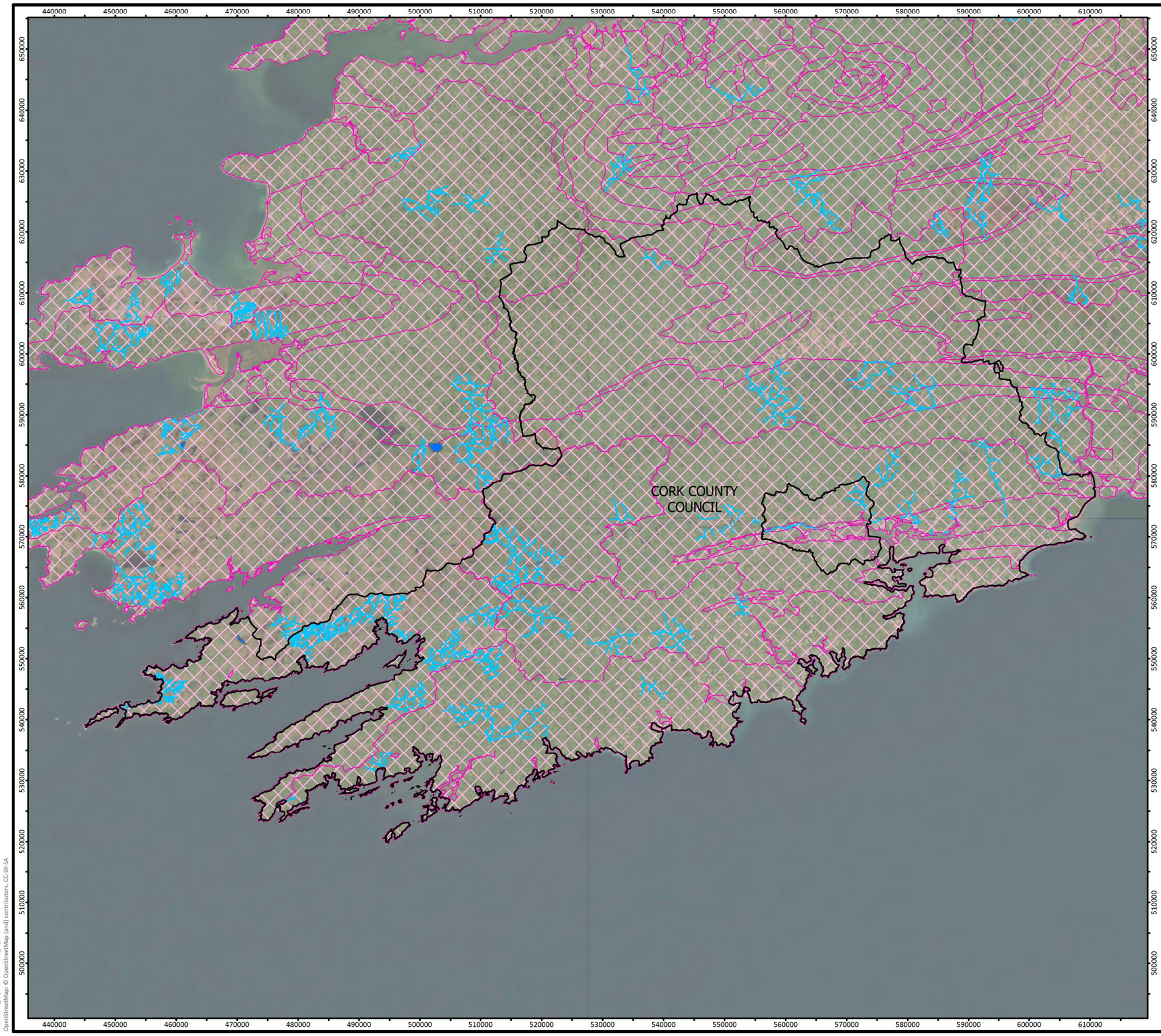

Legend

- Local Authority Boundaries
- WFD Riverwater Bodies that are protected for drinking water
- WFD Lakewater bodies that are protected for drinking water
- WFD Groundwaters that are protected for drinking water

WFD Register of Protected Areas
-
Drinking Water

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.18e

CLIENT: CORK COUNTY COUNCIL

DATE: 30/08/2023 **SCALE:** 1:612,500 @ A3

N W E S 0 4 9 20 km

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4.10 Material Assets

Other level material assets include transport infrastructure, power generation plants and supply networks, water supply, wastewater treatment infrastructure and waste disposal sites among others. Potential opportunities and conflicts associated with these assets were considered in the SEA. Other material assets covered by the SEA include archaeological and architectural heritage (see Section 4.5) and natural resources of economic value, such as soil[58], air and water (see Sections 4.6, 4.8 and 4.9).

4.10.1 Water Services

4.10.1.1 Wastewater

Wastewater demand and capacity information at settlements that were considered by the SEA, where available, includes[59]:

- Population served.
- Loading.
- Capacity.
- Level of treatment.
- Spare capacity or shortfall.
- Compliance with the Urban Waste Water Treatment Directive.
- Wastewater infrastructure investment needs.

The EPA produces annual reports on the treatment of urban wastewater from cities, towns and urban communities. The latest EPA 2022 report[60] 'Urban Waste Water Treatment in 2021' identifies the priority areas where resources must be targeted, in order to protect the environment from the harmful effects of waste water and deliver environmental improvements where they are most needed. Based on the EPA's assessment of monitoring information provided by Uisce Éireann and the enforcement activities carried out by the EPA, this report identifies urban areas with the most important environmental issues that must be addressed. A total of 19 urban areas in the County Council boundary are listed as priority areas.

4.10.1.2 Surface Water Drainage

Sustainable Urban Drainage systems (SUDS) can minimise the quantity and increase the quality of surface water runoff as well as mitigating adverse impacts of climate change. SUDS can also provide amenity and biodiversity benefits.

[58] Soil and geological resources will be considered under this topic including with respect to mineral locations and aggregate potential.
[59] Detailed water services information will inform the preparation of the SEA Environmental Report.
[60] Available at Monitoring & Assessment: Wastewater | Environmental Protection Agency (epa.ie)

4.10.2 Waste Management

The Waste Management Act 1996 requires Local Authorities to make a waste management plan either individually or collectively for their functional areas. In 2015, County Cork was guided by the *Southern Region Waste Management Plan 2015-2021* which provided the framework for solid waste management in the region. Post 2021, waste management in Ireland is guided by the first *National Waste Management Plan for a Circular Economy,* which replaces the existing regional plans. This Plan sets out a framework for the prevention and management of waste in Ireland for the period 2023 to 2029.

4.10.3 Transport

County Cork is traversed by a number of major routes – the M8, the N25, the N20, the N22, the N28, the N71, the N72, and the N73. The County is served by Iarnród Éireann's Cork Commuter (Mallow to Midleton/Cobh) and Intercity Rail (Cork to Dublin/Limerick/Tralee) services . Further to this, TFI Bus Éireann and a number of other private operators provide bus services to the County and its rural areas. Upcoming transport and active travel projects that will serve the County has been considered by the SEA, where available.

4.10.4 Green Infrastructure

Green infrastructure (GI) is a crucial component in building resilient communities capable of adapting to the consequences of climate change with trees, woodlands and wetlands providing carbon capture and slowing water flows while improving air quality. Further opportunity also exists to use nature-based solutions to provide better environments to live, work and visit and which are frequently a cheaper design solution compared to more traditional approaches.

The existing Green Infrastructure in County boasts many key features and activities along the coast and across the urban, rural and upland areas. Many of these are iconic in nature, including the varied and dramatic coastline itself, three castles head, Lough Hyne, Garnish Island and the numerous rivers, streams, parks and open spaces of County and regional significance.

4.10.5 Public Assets and Infrastructure

Public assets and infrastructure that have the potential to be impacted upon by the LACAP, if unmitigated, include settlements; resources such as public open spaces, parks and recreational areas; public buildings and services; transport and utility infrastructure (electricity, gas, telecommunications, water supply, wastewater infrastructure etc.); forestry; and natural resources that are covered under other topics such as water and soil.

4.10.6 Land

The LACAP has the potential to assist with the reuse and regeneration of brownfield sites thereby contributing towards sustainable mobility and reducing the need to develop greenfield lands and associated adverse environmental effects. Brownfield lands are generally located within urban/suburban areas.

4.10.7 Coastline

The Cork coastline extends for some 1,100 km, which is approximately one fifth of the national coastline. It is home to approximately 65% of the County's population who live on or adjacent to the coast, including seven inhabited West Cork islands. The scenic rugged coastline and peninsulas with long stretches of sandy beaches is recognised by the County Council as a valuable amenity resource. The Port of Cork, Whitegate Oil Refinery, Whiddy Island Oil Trans-shipment Terminal and Castletownbere fisheries port are of national importance.

4.10.8 Renewable Energy Potential

Under EU Directive 2001/77/EC Renewable Energy, renewable energy sources are defined as renewable non-fossil energy sources such as, but not limited to wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gas, sewage treatment plant gas, biogases and biochar (i.e., the thermal treatment of natural organic materials in an oxygen-limited environment). Available information on renewable energy potential within and adjacent to the County – and associated Plan provisions – have been considered by the SEA.

4.10.8.1 Energy Related Material Assets and Infrastructure

SEAI (2020[61]) published the kilotonnes of oil equivalent (ktoe) data which showed that 86% of Ireland's energy came from fossil fuels at that time. Transportation and residential represented the highest resource demand. The generation of renewable energy has been increasing over the past ten years, with a growth in the number of wind farms (from 5.8% of gross final energy consumption in 2010 to 13.5 of GFC in 2020[62]). This is an important feature of County Cork's function both onshore and offshore.

All traditional power plants are in a process of transition to renewable/sustainable sources to align with the targets in the Climate Action Plan 2023.

The SEA of Material Assets has utilised information from the following sources:

- Climate Change Advisory Council
- Department of Defence
- Department of Housing, Local Government, and Heritage (DHLGH)[63]
- EPA - marine disposal sites
- Electricity Supply Board (ESB)
- Iarnród Éireann
- Irish Bioenergy Association (IrBEA)
- Irish Solar Energy Association (ISEA)
- Irish Wind Energy Association (IWEA)
- Marine Atlas (for shipping port and route data)
- Ports Authority
- SEAI
- SFPA

[61] SEAI. 2020. SEI01 - Energy Balance data resource; Available at SEI01 - Energy Balance (ktoe) - Datasets - data.gov.ie
[62] SEAI. 2020. Overall renewable energy share - available at Renewables | Energy Statistics In Ireland | SEAI
[63] Energy Offshore Renewable - Datasets - data.gov.ie

- Transport Infrastructure Ireland (TII)
- Uisce Éireann
- Waterways Ireland

4.10.9 Key Issues Relating to the Draft LACAP

It is not likely that the LACAP will result in significant effects to wastewater treatment or water services in general, given the nature of the plan. The key issues in relation to Material Assets are as follows:

- Disruptions to existing transport infrastructure through the development of alternative options such as active travel routes could occur.
- Demands for increased renewable infrastructure and associated connection networks.
- Visual impact of wind developments on the coastline.
- Effects on sensitive receptors with increased demands for active travel/green/renewable infrastructure, in particular during the construction phase.
- The potential for effects on existing green and blue infrastructure and key ecological corridors from inappropriate development.

4.11 Tourism and Recreation

Tourism and recreation are influenced by a range of factors in Ireland. International tourism has increased in recent years. Failte Ireland has recently published their four brand strategies[64] which will define the spatial scope and spread of future tourism developments within Ireland. County Cork hosts two of the three main tourism areas - The Wild Atlantic Way and Irelands Ancient East. The County is also part of the Munster Vales Brand. The Cork Strategic Tourism Task Force, of which Cork County Council is a member, had developed the 'Growing Tourism in Cork – A Collective Strategy' for 2015 -2020. Cultural Heritage sites also support heritage-related tourism and recreation, see Section 4.5. Landscape is also an important aspect in terms of Tourism, see Section 4.4.

The assessment of Tourism and Recreation has utilised the following information sources:

- Department of Transport, Tourism and Sport
- Central Statistics Office (CSO)
- Recreational sailing groups and ferry operators
- Fáilte Ireland
- National Trails Office

[64] Wild Atlantic Way, Dublin's a Breath of Fresh Air, Ireland's Ancient East and Ireland's Hidden Heartlands

4.11.1 Key Issues Relating to the Draft LACAP

The key issues in relation to Tourism and Recreation are as follows:

- Green infrastructure development may have the potential to restrict or reduce the quality of resources important for recreation and/or tourism including angling facilities, boating activities and/or associated resources.
- The promotion or development of blueways and greenways could add additional loading pressures in terms of visitor interactions at sensitive areas such as trampling, disturbance, erosion, littering etc.

4.12 Climate Change

The recent Climate Action and Low Carbon Development (Amendment) Act 2021 was established to provide for the approval of plans by the Government in relation to climate change. This aims at pursuing the transition to a climate resilient, biodiversity rich and climate neutral economy by no later than the end of the year 2050. Ireland's Climate Action Plan 2023 sets out Ireland's national and sectoral targets in this regard.

Future changes in climate and associated impacts on sea level, rainfall patterns/intensity and river flow will influence flooding frequency and extent in the future. Local Authorities in compliance with the Regional Planning Guidelines are attempting to adopt sustainable flood risk strategies in areas likely to be at risk of flooding in the future in the context of climate change and changing weather patterns. Changes to climate could lead to an increase in flooding events in Ireland. The OPW has undertaken a number of Flood Risk Management Studies for different River Basin Districts (RBDs) in Ireland. These studies have identified the areas which are most at risk and future management plans have been advised; these are adopted by the OPW. In some cases, mitigation measures will involve the construction of physical flood defences. The SEA has considered data related to climate from the following sources:

- Climate Change Advisory Council's Annual Review 2023
- Department of the Environment, Climate and Communications
- EPA
- CFRAM Studies[65]

4.12.1 Key Issues Relating to the Draft LACAP

The key issues in relation to Climate Change are as follows:

- The Draft LACAP will contribute to the targets, set out in the Climate Action Plan 2023.
- The potential impact of changes in climate including flooding and temperature increases should be factored into the Draft LACAP.

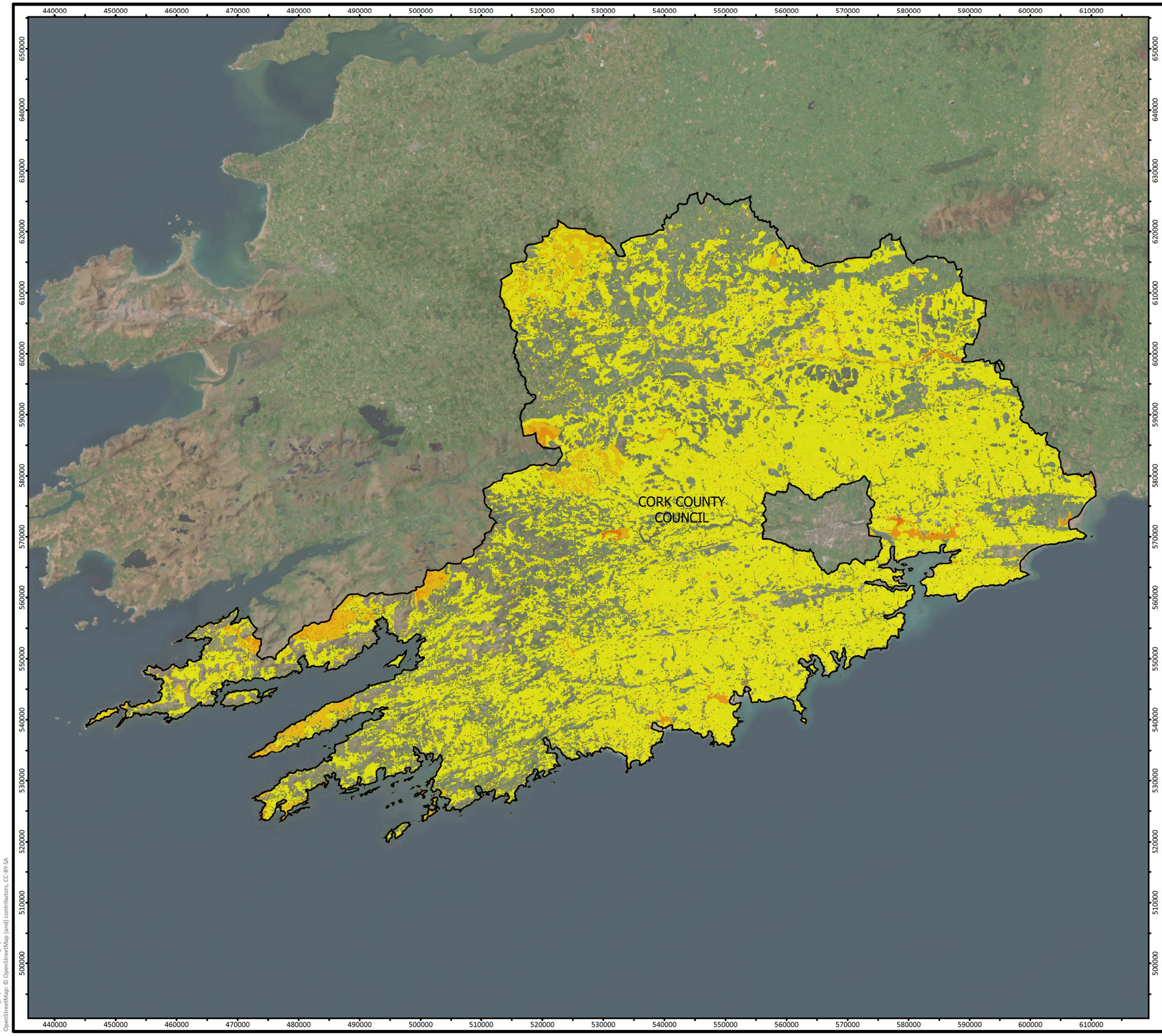
[65] Office of Public Works (2021) Catchment-based Flood Risk Assessment and Management (CFRAM) Programme gov.ie - CFRAM Programme (www.gov.ie)

4.13 Constraints and Opportunities

The environmental baseline data was overlaid in raster form and ranked accordingly to produce an overall constraints and opportunities map for the Council's administrative boundary (Figure 4-19). The map was prepared using Geographical Information System (GIS) software that allowed for a weighting system to be applied with differentiation in certain layers as follows:

Vector Layer	Weighting	Rationale
SAC	1	Protected
SPA	1	Protected
NHA	1	Protected
pNHA	0.5	Not fully protected
Archaeological Heritage	1	Protected
WFD High	0.5	High quality most sensitive to perturbation
Wells and Springs	1	Protected
Groundwater High	1	High vulnerability most sensitive to perturbation
Salmonid Water	1	Protected

Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration. However, the occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures - which have been integrated into the Plan - will need to be complied with in order to ensure that the implementation of the plan contributes towards environmental protection.



Legend

Local Authority Boundaries

Constraints & Opportunities

- 0-1
- 1-2
- 2-3
- 3-4
- 4-5
- 5-6

Constraints and Opportunities

CORK COUNTY COUNCIL
Local Authority Climate Action Plans

FIGURE NO: 4.19

CLIENT: CORK COUNTY COUNCIL

DATE: 08/09/2023 **SCALE:** 1:612,500 @ A3

N W E S 0 4 9 20 km

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4.14 Evolution of the Baseline Environment without the implementation of the Plan

The SEA Directive requires that consideration is given to the likely evolution of the baseline environment in the event the Draft LACAP is not progressed and implemented. In the event the Draft LACAP was not implemented; the baseline environment would primarily evolve in line with the development management standards and environmental protection criteria defined in the Monaghan County Development Plan (CDP) 2019-2025, which is the primary development control framework relevant to the study area. The baseline environment would also be strongly influenced by the Monaghan Biodiversity and Heritage Strategic Plan 2020-2025 and Local Area Plans (LAPs) for the County.

Whilst some level of climate related policy has been defined in the CDP, not progressing the specific set of climate mitigation and adaptation related actions defined in the Draft LACAP would present several significant lost opportunities. A variety of likely positive environmental effects associated with Draft LACAP implementation would not come to fruition. A number of potential adverse effects associated with the existing baseline scenario are more likely to occur.

It is less likely that the local authority as an organisation would adequately reduce its organisational GHG emissions in line with national GHG emission reduction targets. The variety of actions for reducing operational GHG emissions and promoting energy efficiency would not be implemented. There will be less, direct policy support for the local authority transitioning its vehicle fleet to being electric or being powered by renewable fuels, which will decrease the likelihood of this being done successfully.

None of the specific climate related adaptation or flood resilience actions defined in the Draft LACAP would be implemented. Climate change related risks relating to severe weather events (including storms and heatwaves) are less likely to be fully understood and controlled at local level as a consequence. For example, the risk of unforeseen and unmanaged climate change influenced flooding would be higher without the adoption of the defined adaptation actions. Such climate change related events have the potential to have significant adverse environmental effects on a variety of environmental receptors including local communities and ecological receptors.

The variety of nature-based solutions proposed in the Draft LACAP would not be implemented. The GHG emission sequestration potential associated with actions promoting the enhancement of ecological sites and greenspace would not be realised.

The biodiversity related protection measures defined in the Draft LACAP would not be implemented, making it less likely that the risk to biodiversity and protected sites, habitats and species due to climate change factors will be adequately managed and controlled at local level.

The variety of community engagement measures defined in the plan will not be implemented. The result of this would be that GHG emission reduction opportunities relating to the local residential and commercial sectors associated with plan actions are less likely to be fully realised. The local residential and commercial sectors would be less supported in reducing their GHG emissions generally.

The active travel/sustainable transport related actions in the Draft LACAP would not be implemented. The expansion of the EV network in the County will have less express policy support. Promoting a modal shift from private car use to the use of sustainable modes of transport will have less express, community level policy support. The potential for achieving this modal shift will be reduced. There will also be less potential to prevent and reduce local air quality impacts associated with the use of internal combustion engine vehicles in the County. The likelihood of exceedances of ambient air quality standards in the County due to vehicle emissions in congested areas would be greater as a result.

Overall, in the event the Draft LACAP was not implemented, the net result would be that the likelihood of the local authority and local community realising GHG emission reductions commensurate to national GHG emission reductions targets would be reduced. At the same, the risk of negative environmental effects occurring as a result of climate change related risks would be greater.

5. STRATEGIC ENVIRONMENTAL OBJECTIVES

The SEA Directive states that an SEA should also look at *'the environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.'* The identification of environmental protection objectives relevant to a plan provide the basis for evaluating the significance of impacts during the SEA process. All environmental protection objectives relevant to the Draft LACAP have been identified. Further information on other P/P's that define environmental protection objectives relevant to the Draft LACAP is provided in Appendix 1 to this document.

Strategic Environmental Objectives (SEOs) are methodological measures which facilitate the development of targets against which the environmental effects of the Draft LACAP can be tested. SEOs are based on wider environmental protection objectives on local, regional, national, European and international level that are relevant to CCC's Draft LACAP. They are high-level in nature and set strategic goals for improvement.

In this section, SEOs have been defined for range of Environmental Components and can be used as standards against which the provisions of the Draft LACAP can be evaluated in order to help identify areas in which potential significant adverse impacts may occur. The use of these objectives ensures that the SEA focuses only on those environmental issues that are most relevant and significant to the Draft LACAP and the Study Area.

The development of SEOs has been appropriately informed by the SEA Scoping stage of the SEA process, including consultation with statutory Environmental Authorities, interested stakeholders and the general public.

All SEOs applicable to the Draft LACAP are presented in Table 5-1.

Table 5-1: Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species.[66]
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, in response to the biodiversity emergency.
Landscape, Seascape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.

[66] 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

Environmental Component	SEO Code	Strategic Environmental Objective
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

6. DESCRIPTION AND EVALUATION OF PLAN ALTERNATIVES

6.1 Introduction

Article 5(1) of the SEA Directive states that: *'Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and* reasonable alternatives *taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated.'*

The SEA Directive requires that reasonable alternative means of achieving the strategic goals of the Draft LACAP (taking into account the objectives and the geographical scope of a plan or programme) are identified, described and evaluated for their likely significant effects on the environment. Such reasonable alternative must be realistic and capable of implementation.

This section of the SEA Environmental Report examines reasonable alternatives to CCC's Draft LACAP and systematically evaluates the likely significant effects of these alternatives.

Reasonable alternatives to the Draft LACAP were initially explored and examined during the SEA Scoping stage of the SEA process, having regard to the scope, function and strategic aims and main goals of the Draft LACAP, as defined in the Local Authority Climate Action Plan. This process facilitated the accurate identification of reasonable alternatives to the Draft LACAP and also suitably informed the plan-making process, ensuring optimal environmental outcomes.

The reason for considering identified reasonable alternatives within the scope of the environmental assessment must be clearly described and documented. A description of how the assessment of alternatives was carried out must be provided.

Reasonable alternatives will be assessed against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the Draft LACAP. The purpose of this is to determine if the reasonable alternative result in positive, negative, neutral or uncertain environmental outcomes. This assessment process can result in mixed-effects outcomes.

The description and evaluation of reasonable alternatives in this report was undertaken in accordance with guidelines defined in the following two guidance document primarily:

1. Implementation of SEA Directive (2001/42/EC): Assessment of the Effects of Certain Plans and Programmes on the Environment, DEHLG 2004.
2. Developing and Assessing Alternatives in Strategic Environmental Assessment, EPA 2015.

6.2 Goal of the Reasonable Alternative Evaluation Process in SEA

The underpinning goal of the reasonable alternative evaluation process is to ensure that the selection of preferred alternatives by the Local Authority is informed by environmental considerations including:

- The LA's role in influencing sectors and communities with respect to climate action.
- The LA's role in co-ordinating and facilitating climate action – particularly with reference to the DZ.
- The LA's role in creating the local vision for climate action and building capacity to achieve this through advocacy.

6.3 Approach to Developing Reasonable Alternatives

A range of alternatives to the Draft LACAP were considered during the plan-making process. The approach for identifying reasonable alternative to the Draft LACAP is defined below:

1. Iterative communication was held between the plan-making and environmental assessment teams to identify the various alternative approaches and options being considered to achieve the vision of the plan - the reduction of GHG emissions at Local Authority organisational level and within the Community in support of Climate Action policy. This communication commenced early on during the plan-making process.
2. Reasonable alternatives considered were identified. For an alternative to be considered reasonable, it must be practical/functional, realistic and implementable. An evaluation of whether each alternative was practical/functional, reasonable and implementable took place. This evaluation considered the following factors:
    2.1. The vision of high-level goals of the Draft LACAP.
    2.2. The geographic scope of the Draft LACAP.
    2.3. The actual powers and functions of the Local Authority.
    2.4. The climate action merits of the alternative.
    2.5. The genuine ability of the alternative to achieve the plan vision and high-level goals.
    2.6. The technical feasibility of the alternative.
    2.7. The availability of resources, including financial resources to deliver the plan within the required timeframe.
    2.8. The policy hierarchy and the parameters placed around the Draft LACAP by higher-level policy.
    2.9. The legislative context and the parameters placed around the Draft LACAP by climate action and environmental related legislation.

The toolkit contained in the EPA's guidelines entitled '*Developing and Assessing Alternatives in Strategic Environmental Assessment Good Practice Guidance*' (2015) was utilised when identifying reasonable alternatives. The 'Why? What? Where? When?' Model defined in the guidelines were used when framing reasonable alternatives, as shown in Figure 6-1.

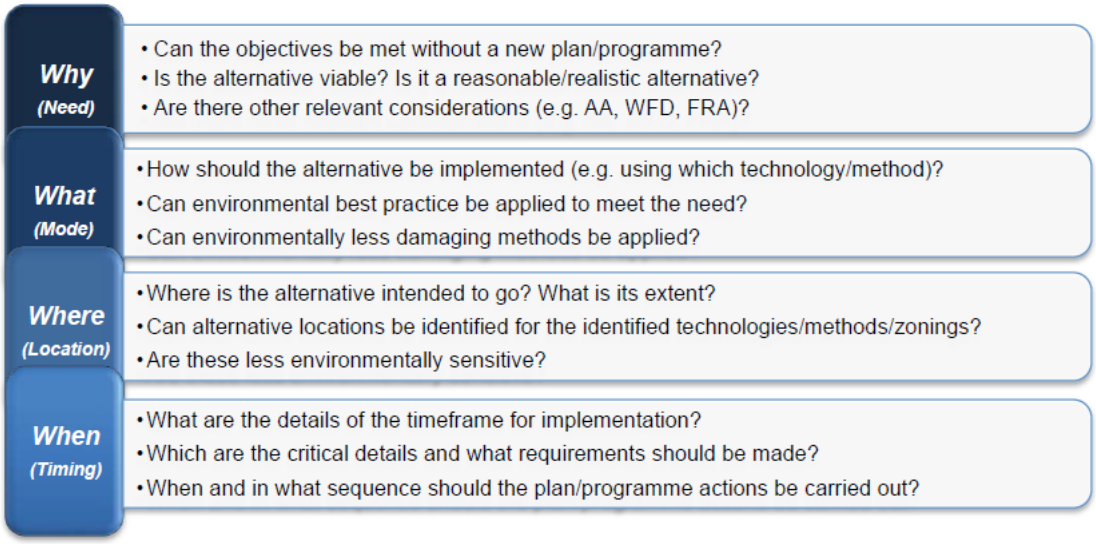

Figure 6-1: 'Why? What? Where? When?' Model for framing alternatives - Adapted from Figure 4.3 Developing and Assessing Alternatives in the Strategic Environmental Assessment Process (EPA, 2015).

6.4 Identification and Description of Reasonable Alternatives

Reasonable alternatives to the Draft LACAP have been identified. A description of these reasonable alternatives and the reasons for selecting these reasonable alternatives are presented in Table 6-1.

A 'Do Nothing' or 'Do Minimum' alternative is not a reasonable alternative in this instance as the preparation of an effective LACAP is a statutory requirement under Section 16 of the Climate Act.

Table 6-1: Reasonable Alternatives to the Draft LACAP

Reasonable Alternative	Description of Reasonable Alternative	Reasoning for selecting this Reasonable Alternative (having regard to the 'Why? What? Where? When' Model defined in Figure 6-1).
Alternative 1 - The Pareto Approach: Prioritise reducing GHG emissions from largest GHG emitting sectors to mitigate against climate change impacts.	This alternative involves developing a LACAP that primarily focusses on climate mitigation and reducing GHG emissions associated with the largest GHG emitting sectors in the County that a local authority can reasonable influence having regard to the functions of a local authority - the Residential and Transport sectors.	This is a viable alternative that could achieve a significant reduction in GHG emissions by prioritising and supporting climate mitigation related action for the Residential and Transport sectors. This alternative would be relevant to the county of Monaghan County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).
Alternative 2 - The Holistic Approach: Adopt a multi-pronged approach and focus on a range of priority areas to mitigate against and adapt to climate change impacts.	This alternative involves developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several theme areas and all socio-economic sectors.	This is a viable alternative that would have enhanced potential to reduce GHG emissions across multiple sectors, potential to offset GHG emissions, and greater potential to protect the local community and the environment from climate change related risks. Climate mitigation and adaptation actions across a wide breath of theme areas would be supported by the LACAP. This alternative would be relevant to the county of Monaghan County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).
Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP): Adopt a multi-pronged approach - that has a strong community engagement emphasis - and focus on a range of priority areas to mitigate against and adapt to climate change impacts.	This alternative involves developing a LACAP that has a balanced focus on both climate mitigation and adaptation across several theme areas and all socio-economic sectors, and which has a strong community engagement emphasis, which underpins, supports and drives the climate action contained in the plan.	This is a viable alternative that would have enhanced potential to reduce GHG emissions across multiple sectors, potential to offset GHG emissions, and greater potential to protect the local community and the environment from climate change related risks. Climate mitigation and adaptation actions across a wide breath of theme areas would be supported by the LACAP. The range of climate mitigation and adaptation actions defined in the LACAP is likely to have better community level and organisational support given its strong community engagement emphasis. This alternative would be relevant to Monaghan County. The alternative would cover the period from 2024 to 2029 (the duration of the prospective LACAP).

6.5 Evaluating the Environmental Effects of Reasonable Alternatives

An evaluation of the potential effects of the reasonable alternatives on the baseline environment has been carried out in accordance with the SEA Directive and best practice guidelines. An evaluation matrix has been developed to facilitate the evaluation of the environmental effects of reasonable alternatives on SEOs relating to each Environmental Component. This evaluation matrix is presented in Table 6-2.

Potential effects of the reasonable alternatives have been categorised as follows in the matrix:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').[67]
- Potential Negative Environmental Impact (indicated in the matrix by a '-').[68]
- Potential Positive and Negative Environmental Impacts (indicated in the matrix by a '+/-').
- Uncertain Environmental Impact ((indicated in the matrix by a '?').
- Neutral, No or Insignificant Environmental Impact (indicated in the matrix by a '0').

[67] Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.
[68] Potential Negative Environmental Impacts are defined as having the potential to hinder the achievement of an SEO.

Table 6-2: Evaluation of the Environmental Effects of Reasonable Alternatives

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP) (A3)	Commentary
Population & Human Health	PHH1	+/-	+/-	+/-	All alternatives considered will support the achievement of this SEO to some degree by promoting sustainable transportation and a modal shift that will have the benefit of reducing vehicle emissions. A3 will deliver these benefits more effectively however given the community engagement emphasis associated with this alternative. All alternatives will likely support active travel related development that may have some degree of adverse effect on population and/or human health through the generation of construction phase dust, noise or congestion in the absence of appropriate mitigation.
	PHH2	0	+	+	A2 and A3 are more holistic in nature and are likely to define specific nuanced and carefully balanced action that aligns with economic development objectives defined in the CDP and supports the achievement of this SEO.
Biodiversity, Flora & Fauna	B1	0	+	+	A2 and A3 will define specific action supporting the enhancement of biodiversity and the protection of biodiversity from climate change risks, including nature-based solutions. A1 will strongly emphasise reducing GHG emissions associated with the Residential and Transport sectors. It is less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity from climate change risks.
	B2	0	+	+	
	B3	0	+	+	
	B4	0	+	+	
	B5	0	+	+	
Landscape, Seascape & Visual Amenity	L1	-	+/-	+/-	All alternatives have the potential to support development that may have a negative impact on landscape character or visual amenity in absence of any mitigation. A2 and A3 are more balanced in nature and are likely to support nature-based solutions, greenspace development and sustainable urban drainage systems which may contribute positively to landscape character or visual amenity.
	L2	-	+/-	+/-	
Cultural Heritage - Archaeology & Architectural	CH1	0	+	+	A1 is less likely to define wide ranging climate adaptation related action that would protect cultural heritage, archaeology and architectural features from climate change risks. A2 and A3 are more balanced in nature and will likely define heritage climate adaptation action which will protect heritage resources from climate change risks.

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP) (A3)	Commentary
Soils	S1	-	-	-	Each of the alternatives are likely to support some degree of development that may be impact the receiving soils environment in the absence of mitigation.
Land Use	LU1	-	+/-	+/-	All alternatives have the potential to support development that may have a negative impact on land use characteristics in the absence of mitigation. A2 and A3 are more balanced in nature and are likely to support wide ranging positive actions that could lead to improving land use value and characteristics, including actions underpinned by nature-based solutions.
Air Quality and Noise	AQN1	+	+	+	Each alternative will deliver to a certain degree in relation to this by promoting sustainable transportation and a modal shift. A3 will deliver most effectively in this regard given the strong community engagement component associated with this alternative.
	AQN2	+/-	+/-	+/-	A1, A2 and A3 are all likely to support the development that may give rise to local air quality impacts - as a result of the generation of airborne dust during construction activities - in absence of any mitigation. At the same, each of these alternatives will spur modal shift that may result in positive local air quality impacts by reducing the level of vehicle related emissions.
	AQN3	-	-	-	A1, A2 and A3 are all likely to support the development that may give rise to noise impacts during the construction phase of the development in absence of any mitigation.
Water	W1	-	+/-	+/-	Each alternative is likely to lead to development that could potentially have an adverse impact upon surface water, groundwater or bathing water quality in absence of any mitigation. A2 and A3 are more likely to promote the development of nature-based solutions and sustainable urban drainage systems that could result in positive effects on water quality. These options will also support the implementation of climate adaptation measures that would reduce the risk to water quality associated with climate change risks. A2 and A3 are more are more likely to define climate adaptation action, and specifically flood resilience related action, which would better support the achievement of W4 and conformance with Flood Risk Management Guidelines.
	W2	-	+/-	+/-	
	W3	-	+/-	+/-	
	W4	0	+	+	
	W5	-	+/-	+/-	

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP) (A3)	Commentary
Material Assets	MAI1	-	-	-	A1, A2 and A3 are all likely to support development that may have a potential negative impact on infrastructure, including existing road infrastructure, in the absence of appropriate mitigation measures.
	MAI2	-	-	-	
	MAI3	+	+	+	All alternatives are likely to contain a suite of climate actions that are supportive of sustainable transportation.
	MAI4	0	+	+	A1 will place a strong emphasis on reducing GHG emissions associated with the Residential and Transport sectors and is likely to place less emphasis on reducing lifecycle GHG emissions associated with promoting better waste/resource management and circularity in the economy. A2 and 3 are likely to contain a wide range of climate action, including circular economy related actions that will better support efficient waste management and a reduction in resource related lifecycle GHG emissions.
	MAI5	0	+	+	A1 will place a strong emphasis on reducing GHG emissions associated with the Residential and Transport sectors and is likely to place emphasis on reducing lifecycle GHG emissions associated with promoting water use efficiency. A2 and 3 are likely to contain a wide range of climate action, including actions that will better support efficient water use and management that would have the benefit of reducing lifecycle GHG emission associated with water use to some degree.
Tourism & Recreation	TR1	-	+/-	+/-	Each alternative is likely to lead to some degree of development involving construction activity that may impact tourism and recreation amenity in the absence of appropriate mitigation. Such construction may need to take place at locations that are sensitive based on their amenity and recreational value, including high amenity parkland and coastal locations. A2 and A3 are both likely to support climate action that positive impacts on tourism and recreation amenity, including climate action that focusses on nature-based solutions and biodiversity/protected site protection and enhancement.
Climate Change	CF1	+	+	+	A1, A2 and A3 all support the achievement of climate change related SEOs to some extent.
	CF2	+	+	+	
	CF3	+	+	+	

Environmental Component	SEO Code	Alternative 1 - The Pareto Approach (A1)	Alternative 2 - The Holistic Approach (A2)	Alternative 3 - The Holistic and Participatory Approach (Current Draft LACAP) (A3)	Commentary
	CF4	+	+	+	A3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level.
Inter-relationships	IR1	0	+	+	A3 is likely to support maintaining and enhancing human health and eco-system processes the most given its holistic and well-balanced nature and community engagement emphasis.

6.6 Reasons for Choosing the Preferred Plan

Alternative 1 - The Pareto Approach - will lead to some positive environmental effects and will result in the reduction of GHG emissions in the sectors that the local authority can control or exert substantial influence on that contribute most in terms of GHG emission in the County - the Residential and Transport sectors. It is less likely that this alternative will deliver the wide-ranging climate mitigation and offsetting related action required to fully realise GHG emission reduction potential in the County. It is also less likely this alternative would define a wide range of climate adaptation measures that would fully protect biodiversity, heritage resources, environmental receptors and people from climate change risks. This alternative approach may generate several negative environmental effects, which would not be counterbalanced by the positive environmental effects associated with Alternatives 2 and 3.

Alternative 2 - The Holistic Approach - and Alternative 3 - The Holistic and Participatory Approach - will both broadly deliver suitably wide ranging and effective climate action. These alternatives have the potential to generate multiple positive environmental effects, including a reduction in GHG emissions at organisational, community and sectoral levels, in addition to a variety of other environmental benefits. These alternatives will place a balanced emphasis on both climate mitigation and adaptation action, ensuring climate change related environmental risks are adequately understood and managed at community level.

Alternative 3 has the best potential to deliver effective climate action given its holistic, wide encompassing nature; and given its strong community engagement emphasis, which supports better participation in climate action at community level. Alternative 3 has better potential there to fully realise potential environmental effects than Alternative 2.

Reasonable Alternative 3 - The Holistic and Participatory Approach - therefore constitutes the preferred alternative or preferred plan.

6.7 Data Gaps and Technical Limitations relating to the Identification and Evaluating Reasonable Alternatives

There were no data gaps or technical limitations that inhibited the ability of the project to identify and evaluated reasonable alternative being considered at high level during the plan making process.

7. EVALUATION OF THE ENVIRONMENTAL EFFECTS OF PLAN IMPLEMENTATION

7.1 Introduction

An evaluation of the potential effects of the Preferred LACAP on the baseline environment as characterised and described in Section 4 of this report has been carried out and is documented in this section of the report. This evaluation has been carried out against the Strategic Environmental Objectives (SEOs) established for the aspects of the baseline environment which are likely to be significantly affected by the Draft LACAP. These SEOs are documented in Section 5 of this report.

7.2 Evaluation of the Environmental Effects of Plan Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment has been carried out in accordance with the SEA Directive and best practice guidelines. An evaluation matrix has been developed to facilitate the evaluation of the Preferred LACAP on SEOs relevant to each Environmental Component. An explanation of the approach and methodology for this detailed evaluation and completed evaluation matrices for each Draft LACAP Theme Area are contained in Appendix 3 of this report.

An overview of the key environmental effects the Draft LACAP may have on Environmental Components has been presented in Table 7-1.

The following should be noted in relation to the evaluation undertaken:

- The evaluation is strategic and high-level in nature given the strategic nature of the Draft LACAP. A precise evaluation of potential environmental effects cannot be carried out due to a lack of exact detail on actions and development that will be supported by the Draft LACAP.
- Environmental effects of the Draft LACAP have been described in accordance with descriptive terminology defined in the Environmental Protection Agency's guidance document entitled 'Guidelines on the information to be contained in Environmental Impact Assessment Reports' (2022).
- The evaluation considers all potential direct, indirect/secondary, cumulative[69], synergistic[70], short, medium and long-term, permanent and temporary, positive and negative environmental effects.
- The evaluation considers inter-relationships and interactions between one Environmental Component and another which can result in an environmental impact.
- The evaluation considers all potential environmental effects arising from unforeseen abnormal events.
- The evaluation considers potential transboundary effects.
- The potential environmental effects described are the potential effects that could occur with the adoption of any environmental mitigation measures.

[69] The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
[70] The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.

Table 7-1: Overview of the Key Environmental Effects of Plan Implementation

Key Environmental Effect	Main Relevant Environmental Component/s
The variety of climate actions defined in the plan, including organisational and community-based actions are likely to generate multiple, slight positive effects on climate - having regard to the share of GHG emission reductions that can be supported via each individual action relative to national GHG emission reduction targets and requirements.	CC, AQN.
The plan is broadly supportive of different forms of community and local area based renewable energy development, which will have a positive effect on the climate environment.	CC, AQN.
In the absence of appropriate mitigation, community and local area renewable energy development that might be supported by plan actions, including any associated ancillary and linear infrastructure, has the potential to have a variety of unintended and potentially significant negative environmental effects however, including effects on local human receptors, biodiversity, landscape character and visual amenity, and the receiving noise environment.	PHH, BFF, L, AQN.
The plan supports the lighting upgrades in the town of Monaghan. In absence of appropriate mitigation, the wide use of lighting may lead to adverse effects on sensitive nocturnal species.	BFF.
Several plan actions are supportive of the upgrading/retrofitting of buildings to improve energy performance. In the absence of appropriate mitigation, such actions may have unintended and potentially significant negative effects on buildings that constitute protected structures, or on the context in which such protected structures of architectural or cultural heritage merit sit.	CH.
The plan supports the carrying out of a range of flood alleviation and resilience actions, including development and maintenance related actions. These range of actions will generate positive environmental effects on water quality, hydrology and biodiversity. The delivery of this action has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including human receptors, ecological receptors and cultural heritage assets.	W, BFF, PHH, CH.
The carrying out of the range flood alleviation and resilience action contained in the plan has the potential to create unintended and potentially significant negative environmental effects in the absence of appropriate mitigation, including effects on water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems and the receiving air, noise and human environments (due to construction related impacts).	W, BFF, AQN, PHH.

Key Environmental Effect	Main Relevant Environmental Component/s
The plan contains a set of actions designed to promote better resource management and the circular economy at organisational, community and local area level. This action, if implemented effectively, is likely to have some degree of environmental effect, as it will support proper waste management, reduce the risk of waste related environmental pollution or nuisance, and promote material circularity and resource efficiency, and consequently a reduction inf material production related lifecycle GHG emissions.	MA, W, S, PHH, CC.
The inappropriate or improper implementation of waste management related action could have unintended, negative environmental and nuisance related effects, including effects on the receiving human, air, noise, water, soils and traffic environment.	PHH, AQN, N, S, MA.
The plan supports the development of community and local area level nature based solutions - in response to climate related risk - which are supportive of biodiversity protection and enhancement. This action has the potential to have wide ranging slight to significant positive effects on biodiversity, flora and fauna.	BFF.
The plan supports green infrastructure development broadly. In absence of appropriate design and mitigation, the development of green infrastructure that is of a significant scale or extent could potentially result in negative environmental effects, including negative construction related effects, negative effects on biodiversity or negative effects on cultural heritage assets.	PHH, W, S, AQN, BFF, CH.
The plan defines a variety of climate adaptation related actions designed to protect human receptors, biodiversity and heritage assets from the impacts of climate change influenced events such as flooding. The implementation of this action has the potential to generated positive effects for these environmental receptors - by reducing the risk of such events impinging on or damaging these receptors.	PHH, BFF, CH.
Plan actions support the development, expansion and management of safe active travel networks. The delivery of an expanded safe active travel network has the potential to promote the use of sustainable and active travel modes in the community, encourage modal shift, reduce traffic related risks and support the reduction of vehicle related emissions - thereby positively impacting population and human health, local air quality and the climate environment.	PHH, AQN, CC, LU, MA.
Plan actions support the development, expansion and management of safe active travel networks. In the absence of appropriate design and mitigation, the development of active travel networks, depending on the particular nature, scale and extent of such development, could potentially have slight to significant negative effects on the receiving human, noise, air, water, soils, biodiversity, cultural heritage or existing traffic and transport environments.	PHH, AQN, W, S, BFF, CHH, MA, LU.
Plan actions support the expansion of the Electric Vehicle (EV) charging network and active travel parking in the local authority functional area. The successful delivery of this action has the potential to underpin the use of EV vehicles and active travel modes at community and local area level and support the reduction of vehicle related emissions, thereby positively impacting on local air quality, the climate and population and human health.	AQN, CC, PHH.

Key Environmental Effect	Main Relevant Environmental Component/s
Plan actions support the expansion of EV charging network and active travel parking across the breadth of the local authority functional area. In the absence of appropriate mitigation, the construction of additional charging point infrastructure could have a range of slight to significant negative environmental effects on the receiving human, noise, air, water and biodiversity and cultural heritage components present in a particular local context.	PHH, AQN, W, BFF.

7.3 Potential Cumulative Effect of the Draft LACAP in combination with other Plans and Projects

The cumulative effects of a plan are an important consideration in SEA given that a plan may envisage the occurrence of many different actions and developments taking place in parallel with each other in a particular location/geographic area over a particular time period. One benefit of SEA is being able to evaluate the in-combination environmental effects of multiple envisaged projects.

The following types of cumulative effects can occur due to the implementation of a plan:

- Intra-plan Cumulative Effects - Individual environmental effects associated with a single plan interacting and combining to create a larger environmental effect.
- Inter-plan Cumulative Effects - The environment effects of a plan and the environmental effects of another plan interacting and combining to create a larger environmental effect.

7.3.1 Intra-plan Cumulative Effects

The evaluation of Draft LACAP intra-plan cumulative effects has been embedded into the detailed evaluation of environmental effects presented in Appendix 3. Potential intra-plan cumulative effects are presented below:

- The LACAP provides for actions which support the delivery of development and infrastructure projects (in the form of flood resilience, coastal protection, active travel, renewables, nature-based solutions projects) which could contribute - if incorrectly managed - to cumulative impacts through construction related environmental effects (site run-off, dust, noise pollution etc.).
- Increased access to sites - such as nature reserves, beaches, greenspaces - could be facilitated by the combination of actions within the LACAP. Therefore, there could be cumulative effects related to this, particularly along waterways.
- The LACAP supports a variety of actions relating to flood resilience and alleviation projects, which could introduce catchment level cumulative impacts on water quality, flow and hydrological regime/characteristics.
- The effects of multiple LACAP actions have the potential to combine to robustly support a shift to sustainable and active travel modes of transport. This has the potential to generate a variety of cumulative positive environmental effects, including positive effects on local air quality, human health, biodiversity and climate.
- The variety of positive effects of associated with the implementation of plan actions have the potential to combine and interact and have long-term and wide encompassing positive environmental effects on a variety of environmental components, including population and human health, climate biodiversity, water quality and hydrology, traffic and transport, material assets, cultural heritage and landscape and visual amenity.
- The variety of positive climate related effects associated with plan actions have the potential to combine to create a larger and very significant positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.

The potential cumulative environmental effects listed above have the potential to extend beyond the boundary of the local authority functional area.

Plan actions that generate positive or negative environmental effects for one environmental component have the potential to indirectly generate positive or negative environmental effects for interrelated environmental components. For example, actions supporting the delivery of SuDS will improve water quality, which in turn can have a positive effect on aquatic ecology. An assessment of impact inter-relationships and interactions is already embedded in the evaluation of environmental effects that has been carried out in this report. This ensures that there is adequate coverage of all potential environmental effects associated with the implementation of plan actions. A matrix showing the existence of potential inter-relationships between environmental components has been developed and is presented in Table 7-2 to aid in the understanding of these relationships.

Table 7-2: Inter-relationship between Environmental Components

	Population and Human Health	Biodiversity, Flor and Faun	Landscape, Seascape and Visual Amenity	Cultural Heritage - Archaeology & Architectural	Soils	Land Use	Air Quality and Noise	Water	Material Assets	Tourism and Recreation	Climate Change
Population and Human Health											
Biodiversity, Flora and Fauna	■										
Landscape, Seascape and Visual Amenity	■	■									
Cultural Heritage - Archaeology & Architectural		■	■								
Soils	■	■									
Land Use	■	■	■	■	■						
Air Quality and Noise	■	■				■					
Water	■	■			■	■					
Material Assets	■			■		■		■			
Tourism & Recreation	■	■	■	■		■	■		■		
Climate Change	■	■		■	■	■	■	■	■		

Note: Green highlighting indicates a potential interrelationship/interaction

7.3.2 Inter-plan Cumulative Effects

Other plans and programmes that the Draft LACAP has a relationship with are identified in Section 2.5 of this report. It should be noted that all other plans programmes have been or will be subject to environmental, including SEA and AA, for the purpose of preventing and mitigating potential negative environmental effects. Potential inter-plan cumulative effects are presented below:

- Conflicts between climate targets between various organisations - however, all higher order plans such as the CDP, RSES and the National Climate Action plan are aligned with the content of the LACAP. Adaptive language could provide the flexibility to allow localised augmentations to targets to increase or align with stakeholders within the lifetime of the LACAP.
- The LACAP provides for actions which support the delivery of development and infrastructure projects (in the form of flood resilience, coastal protection, active travel, renewables, nature based solutions projects) which could contribute - if incorrectly managed - to cumulative impacts through construction related environmental effects (site run-off, dust, noise pollution etc.) in combination with development supported by other plans, including higher order plans (E.g., the CDP, LAPs, Framework for Alternative Fuel Infrastructure in Transport).
- Increased access to sites - such as nature reserves, beaches, greenspaces - could be facilitated by the combination of actions within the LACAP. Therefore, there could be cumulative effects related to this, particularly along waterways, in combination with other plans that support increased access to such sites.
- The LACAP supports a variety of actions relating to flood resilience and alleviation projects, which could introduce catchment level cumulative impacts on water quality, flow and hydrological regime/characteristics in combination with other plans that support such projects (E.g., Flood Risk Management Climate Change Sectoral Adaptation Plan).
- The effects of multiple LACAP actions have the potential to combine to robustly support a shift to sustainable and active travel modes of transport in combination with other plans. This has the potential to generate a variety of cumulative positive environmental effects, including positive effects on local air quality, human health, biodiversity and climate.
- The variety of positive effects of associated with the implementation of plan actions - in parallel with actions defined in other plans and programmes that are likely to generate positive environmental effects - have the potential to combine and interact and have long-term and wide encompassing positive environmental effects on a variety of environmental components, including population and human health, climate, biodiversity, water quality and hydrology, traffic and transport, material assets, cultural heritage and landscape and visual amenity.
- The variety of positive climate related effects associated with plan actions - in parallel with actions defined in other plans, including higher order plans, that are likely to generate positive effects on climate (E.g., the CAP23) - have the potential to combine to create a larger and profound positive effect on climate - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.

The potential cumulative environmental effects listed above have the potential to extend beyond the boundary of the local authority functional area.

8. MITIGATION MEASURES

Potential negative environmental effects that may occur as a result of the implementation of the Draft LACAP (without considering any mitigation) have been identified in Section 8 of this report. The SEA Directive requires that mitigation measures to prevent, reduce and as fully as possible offset any potential significant negative environmental effects due to the implementation of a plan are defined. This section of the report describes the mitigation measures to ameliorate the potential negative environmental effects that may occur as a result of the implementation of the Draft LACAP.

In this case, the following forms of mitigation have been adopted to ameliorate the negative environments of the Draft LACAP and maximise potential positive effects of the plan:

- Mitigation through consideration of alternatives.
- Mitigation through integration of environmental considerations into the LACAP.
- Mitigation through consideration of development management standards/environmental protection objectives contained in the CDP.

8.1 Mitigation through consideration of alternatives

A number of alternatives were considered at an early stage in the process. The environmental effects of these alternatives were evaluated during the SEA process. The preferred Draft LACAP was chosen over the other alternative options considered for the following reasons:

- **Alternative 1 (considered) - The Pareto Approach -** will lead to some positive environmental effects, however it is less likely that this alternative will deliver the wide ranging and effective climate mitigation and adaptation action likely to result from implementation of the preferred Draft LACAP. This alternative approach may also generate several negative environmental effects, which would not be counterbalanced by the potential positive environmental effects associated with the preferred Draft LACAP.
- **Alternative 2 (considered) - The Holistic Approach -** and the preferred Draft LACAP - The Holistic and Participatory Approach - will both broadly deliver suitably wide ranging and effective climate action. These alternatives both have the potential to generate multiple positive environmental effects. Both alternatives have equal potential to generate some negative environmental effects.
- **Alternative 3 (preferred) - Draft LACAP -** was selected over the other Alternative 2 however as it has the best potential to deliver effective climate mitigation and adaptation action and positive environmental effects, given its strong community engagement emphasis, which supports better participation in climate action at community level.

8.2 Mitigation through integration of environmental considerations into the Plan

The plan making process was carried out in parallel with the SEA and AA processes. Regular communication and interaction took place between the environmental assessment team and the plan making team. Environmental considerations that came to light during the SEA and AA processes, including consultation processes, were regularly communicated to the plan making team during the plan making process. As necessary, environmental mitigation measures to ameliorate the potential negative environmental effects of implementing the Draft LACAP were developed and then integrated into the Draft LACAP. Much of the environmental mitigation was embedded in the plan early on in the process as a result of this. This process was carried out in an iterative manner to ensure optimal plan making and environmental outcomes. Environmental considerations were also integrated into the plan so as to facilitate maximising identified positive environmental effects of the Draft LACAP.

Mitigation measures have been proposed that maximise the co-benefits of climate action for other environmental components such as local air quality, human health, biodiversity, water quality and other interrelated areas (i.e., win-win solutions).

Additional text clarifying environmental protection related obligations and environmental enhancement opportunities has been attached to a variety of defined actions in the plan. This text has been shaped to ensure that environmental considerations are appropriately taken into account during plan implementation. This text has also been shaped to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects.

Several environmental governance principles were established to ensure plan implementation generates the minimum level of negative environmental effects and the maximum level of positive environmental effects. These environmental governance principles shall underpin and guide plan implementation and shall apply to and be integrated into all actions/activities which result due to the implementation of the plan.

Environmental mitigation measures to be integrated into the Draft LACAP to prevent, reduce and fully offset any potential significant negative environmental effects, and to maximise potential environmental benefits and co-benefits of the Draft LACAP, are presented in Table 8-1 and Table 8-2. For clarity and succinctness, only the Draft LACAP Action and the associated proposed mitigation measures have been presented in Table 8-1. The reader is asked to refer to Appendix 3.2 - Detailed Evaluation of Environmental Effects of Plan Implementation, for an understanding of the potential environmental effects associated with each individual action which are being mitigated (in the case of negative environmental effects) or maximised (in the case of positive environmental effects).

Due to the inter-relationship between various environmental components, environmental mitigation measures defined for one component can also serve to benefit another environmental component.

Table 8-1: Proposed Environmental Mitigation Measures related to the actions

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
4.3.1.1.1	Assess demand sources, e.g buildings, equipment, etc to identify opportunities to eliminate demands	Assess electricity demand sources, e.g buildings, equipment, etc to identify opportunities to eliminate demands
4.3.1.1.2	Upgrade lighting to LED where financially viable	Upgrade lighting to LED where financially viable, while ensuring the lumen levels and spectral range are maintained or reduced/controlled to avoid effects to biodiversity.
4.3.1.1.3	Investigate opportunities for renewable energy sources to identify projects for annual implementation programme	Investigate opportunities for renewable energy sources to identify projects for annual implementation programme, having due regard to planning and environmental protection considerations.
4.3.1.1.4	Replace equipment with more efficient alternatives when available and financially viable	Replace equipment with more efficient alternatives when available and financially viable whilst ensuring WEEE generated as a result of this action is appropriately managed.
4.3.1.2.1	Assess demand sources to identify opportunities to eliminate demands	Assess heating demand sources to identify opportunities to eliminate demands
4.3.1.2.2	Assess opportunities to replace oil/gas burners usage with renewable alternatives to identify projects for annual implementation programme	Assess opportunities to replace oil/gas burners usage with renewable alternatives to identify projects for annual implementation programme; having due regard to planning and environmental protection considerations.
4.3.1.2.3	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme; having due regard to environmental sensitivities such as local human receptors, protected species, European sites and biodiversity, and the need to appropriately conserve protected structures.
4.3.1.2.4	Assess opportunities to upgrade building air tightness to identify projects for annual implementation programme	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme; having due regard to environmental sensitivities such as local human receptors, protected species, European sites and biodiversity, and the need to appropriately conserve protected structures and features.
4.3.1.2.1	Assess demand sources to identify opportunities to eliminate demands	Assess heating demand sources to identify opportunities to eliminate demands
4.3.1.2.2	Assess opportunities to replace oil/gas burners usage with renewable alternatives to identify projects for annual implementation programme	Assess opportunities to replace oil/gas burners usage with renewable alternatives to identify projects for annual implementation programme; having due regard to planning and environmental protection considerations.
4.3.1.2.3	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme; having due regard to environmental sensitivities such as local human receptors, protected species, European sites and biodiversity, and the need to appropriately conserve protected structures.
4.3.1.2.4	Assess opportunities to upgrade building air tightness to identify projects for annual implementation programme	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme; having due regard to environmental sensitivities such as local human receptors, protected species, European sites and biodiversity, and the need to appropriately conserve protected structures and features.
4.3.1.3.1	Assess demand sources to identify opportunities to eliminate demands	Assess transport demand sources to identify opportunities to eliminate demands

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
4.3.1.3.2	Assess opportunities to replace vehicles with EV where alternatives available and financially viable consumption to identify projects for annual implementation programme	Assess opportunities to replace vehicles with EV where alternatives available and financially viable consumption to identify projects for annual implementation programme. Whilst ensuring energy/fuel used to power electric vehicles is sustainably sourced, and appropriate end-of-life management practices are in place for Electric Vehicles.
4.3.1.3.3	Assess opportunities to utilise low emission fuels where available and financially viable to identify opportunities consumption to identify projects for annual implementation programme	Assess opportunities to utilise low emission fuels where available and financially viable to identify opportunities consumption to identify projects for annual implementation programme. Whilst ensuring energy/fuel used to power low emission vehicles is sustainably sourced.
4.3.1.4.2	Replace equipment with more efficient when available and financially viable	Replace equipment with more efficient alternatives when available and financially viable whilst ensuring WEEE generated as a result of this action is appropriately managed.
4.2.1.6.2	Any additional or replacement of existing assets needs to take into account the 2030 and 2050 carbon reduction targets.	Any additional or replacement of existing assets needs to take into account the need for sustainability and the 2030 and 2050 greenhouse gas emission reduction targets.
4.4.1.1.2	Trial the EU funded HYBES project 'living lab' in the decarbonisation zone.	Trial the EU funded HYBES project 'living lab' in the decarbonisation zone; having appropriate regard to environmental sensitivities such as sensitive human receptors, European sites and biodiversity, and the need to appropriately conserve protected structures.
4.4.1.3.1	Local Climate Action projects will be funded through the new Community Climate Action Programme (CCAP). The CCAP will operate under the following themes. • Home/Energy • Travel • Food and Waste • Shopping and Recycling • Local Climate and Environmental Action. The fund allocated to Cork County is €1.2 million over a three year period. There will be €600,000 for the first 18 months and €600,000 in the following 18 month period.	Local Climate Action projects will be funded through the new Community Climate Action Programme (CCAP). The CCAP will operate under the following themes. • Home/Energy • Travel • Food and Waste • Shopping and Recycling • Local Climate and Environmental Action. The fund allocated to Cork County is €1.2 million over a three year period. There will be €600,000 for the first 18 months and €600,000 in the following 18 month period. Promote the need to consider environmental protection requirements during such energy projects.
4.4.1.8.2	Continue the implementation of 'safe routes to school' and neighbourhood greenways to further enhance localised active-travel infrastructure.	Continue the implementation of 'safe routes to school' and neighbourhood greenways to further enhance localised active-travel infrastructure; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.
4.4.1.8.3	Continue promotion and support for the Active Travel Green Flags.	Continue promotion and support for the Active Travel Green Flags; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.
4.4.1.8.5	Continue to encourage the development of bottom-up sustainable transport initiatives and engage with communities on new initiatives, where appropriate.	Continue to encourage the development of bottom-up sustainable transport initiatives and engage with communities on new initiatives, where appropriate; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
4.5.1.2.2	Work with stakeholders in identifying wetlands, and support rewetting and restoration programmes.	Work with stakeholders in identifying wetlands, and support rewetting and restoration programmes, whilst exerting influence and control, as appropriate, to promote the carrying out of such programmes in accordance with relevant environmental protection requirements, including water quality, habitat and protected species related requirements.
4.5.1.2.6	Identify opportunities to preserve, enhance and develop ecological connections between areas of high biodiversity value, via green infrastructure networks, wildlife corridors, etc.	Identify opportunities to preserve, enhance and develop ecological connections between areas of high biodiversity value, via green infrastructure networks, wildlife corridors, etc.; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality.
4.5.1.3.1	Promote biodiversity net gain in all new public and private developments: Require the submission of a green infrastructure statement for all development. Continue to integrate ecological expertise within the development management process including at pre-planning and planning application stages.	Promote biodiversity net gain in all new public and private developments: Require the submission of a green infrastructure statement for all development, ensuring environmental protection requirements are appropriately considered during the planning of green infrastructure. Continue to integrate ecological expertise within the development management process including at pre-planning and planning application stages.
4.5.1.3.2	Continue to integrate ecological expertise and biodiversity protections through placemaking measures in the development and management of public projects including housing, transport infrastructure and public realm projects etc.	Continue to integrate ecological expertise and biodiversity protections through placemaking measures in the development and management of public projects including housing, transport infrastructure and public realm projects etc.; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.5.1.4.2	Undertake review of existing council-owned housing estates to supports residents in identifying areas suitable for retrofitting of biodiversity protective measures in accordance with best practice (e.g. tree planting, wildflower meadows, pollinator zones etc.).	Undertake review of existing council-owned housing estates to supports residents in identifying areas suitable for biodiversity protective measures in accordance with best practice (e.g. native tree planting, wildflower meadows, pollinator zones etc.).
4.5.1.4.3	Identify a range of potential pilots to demonstrate sustainable measures including nature-based SuDS; and pilot a biodiversity- and climate-led design for Council-led social housing developments with measures such as green roofs, green walls, wetland & pond SUDS, green carparking, nest boxes in facades, grasslands, and wildlife friendly shrubs and trees in open space.	Identify a range of potential pilots to demonstrate sustainable measures including nature-based SuDS; and pilot a biodiversity- and climate-led design for Council-led social housing developments with measures such as green roofs, green walls, wetland & pond SUDS, green carparking, nest boxes in facades, grasslands, and wildlife friendly native shrubs and trees in open space; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, local air quality etc.
4.5.2.1.3	Work with partners LAWPRO, Uisce Eireann, etc. to identify the impacts of critical and vulnerable receptors in accordance with the River Basin Management Plan and Water Framework Directive and assist in the	Work with partners LAWPRO, Uisce Eireann, etc. to identify the impacts of critical and vulnerable receptors in accordance with the River Basin Management Plan and Water Framework Directive and assist in the improvement of river water quality and restoration projects, whilst promoting the need to consider environmental protection requirements during such projects.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
	improvement of river water quality and restoration projects.	
4.5.2.1.4	Utilise natural flood management where feasible and financially viable.	Utilise natural flood management where feasible and financially viable; having due regard to the need to promote environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.
4.5.2.3.1	With partners, undertake a Coastal Vulnerability Assessment of the Cork coastline to assess the impact of sea level rise to shoreline change of the Cork Coastline, to inform integrated coastal zone management and identify areas with particular requirements, and to address coastal erosion and implement coastal flooding prioritising ecosystem-based adaptation actions.	With partners, undertake a Coastal Vulnerability Assessment of the Cork coastline to assess the impact of sea level rise to shoreline change of the Cork Coastline, to inform integrated coastal zone management and identify areas with particular requirements, and to address coastal erosion and implement coastal flooding prioritising ecosystem-based adaptation actions; having due regard to environmental sensitivities such as European sites and biodiversity.
4.5.2.3.4	With stakeholders, identify climate adaptation measures for coastal infrastructure & associated defences, and utilize natural coastal management where feasible and financially viable.	With stakeholders, identify climate adaptation measures for coastal infrastructure & associated defences, and utilize natural coastal management where feasible and financially viable; having due regard to environmental sensitivities such as European sites and biodiversity.
4.5.3.1.1	Implement Heritage plan for all aspects of conservation, awareness and recording of all aspects of heritage (built, natural, cultural) ensuring cognisance is taken of climate change.	Implement Heritage plan for all aspects of conservation, awareness and recording of all aspects of heritage (built, natural, cultural) ensuring cognisance is taken of climate change and environmental protection considerations, including heritage conservation requirements.
4.5.3.1.2	Incorporate climate resilience through Built Heritage Investment scheme, Historic Structure Fund and any other relevant funds introduced.	Incorporate climate resilience through Built Heritage Investment scheme, Historic Structure Fund and any other relevant funds introduced, having due regard to environmental protection considerations, including heritage conservation requirements.
4.5.4.1.1	Support sectoral and national afforestation targets in mitigating climate change and the promotion of sustainable forest management initiatives.	Support sectoral and national afforestation targets in mitigating climate change and the promotion of sustainable forest management initiatives; having due regard to environmental sensitivities such as European sites, water quality and biodiversity.
4.5.4.1.2	Develop a Tree Strategy to provide a framework for the planning, protection, planting and management of trees and woodlands within Cork County.	Develop a Native Tree Strategy to provide a framework for the planning, protection, planting and management of trees and woodlands within Cork County; ensuring a focus on native trees and having due regard to environmental sensitivities such as European sites and biodiversity.
4.5.4.1.5	Support the implementation of the National Peatlands Strategy.	Support the implementation of the National Peatlands Strategy, whilst promoting the need to consider environmental protection requirements during such projects.
4.5.4.1.6	Implementation of County Development Plan Policy which seeks to achieve a net gain in green infrastructure through the protection and enhancement of existing assets	Implementation of County Development Plan Policy which seeks to achieve a net gain in green infrastructure through the protection and enhancement of existing assets and the provision of new green infrastructure; having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
	and the provision of new green infrastructure.	
4.5.5.1.1	Encourage the promotion of sustainable land use practices and nature-based solutions to water resource management and flooding which can enhance community resilience by providing natural flood defences, promoting climate adaptation.	Encourage the promotion of sustainable land use practices and nature-based solutions to water resource management and flooding which can enhance community resilience by providing natural flood defences, promoting climate adaptation, having due regard to environmental sensitivities, including Biodiversity, European sites, water quality and sensitive human receptors.
4.5.5.1.2	Promote future proofing in the design and planning of new development to fully consider the potential impacts of climate change and the need for measures to increase the resilience of development to any such impacts.	Promote future proofing in the design and planning of new development to fully consider the potential impacts of climate change and the need for measures to increase the resilience of development to any such impacts; having due regard to environmental sensitivities, including Biodiversity, European sites, water quality and sensitive human receptors.
4.6.1.1.7	Work with other stakeholders to promote and support Cork County as a sustainable tourism destination.	Work with other stakeholders to promote and support Cork County as a sustainable tourism destination; whilst having due regard for sensitivities including biodiversity and European sites.
4.6.1.1.10	Explore zero/low carbon models of transporting goods in Cork County e.g the use of cargo-bike hire schemes.	Explore zero/low carbon models of transporting goods in Cork County e.g the use of cargo-bike hire schemes, ensuring due regard is had to the sustainability and potential life-cycle impacts of other transport modes.
4.6.1.3.5	Provide information and raise awareness to Cork County enterprises and business groups to promote supports to undertake retrofits, energy efficiency and renewable energy installation on commercial buildings.	Provide information and raise awareness to Cork County enterprises and business groups to promote supports to undertake retrofits, energy efficiency and renewable energy installation on commercial buildings - whilst promoting the need to consider environmental protection requirements during such energy projects.
4.6.1.5.5	Work in partnership with farmers to improve practices and infrastructure.	Work in partnership with farmers to improve practices and infrastructure, whilst promoting the need for farming enterprises to consider relevant planning and environmental protection requirements.
4.7.1.2.1	Develop Active travel projects throughout the county which can deliver greatest behavioural change.	Develop Active travel projects throughout the county which can deliver greatest behavioural change, having due to regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality, and opportunities to promote nature based solutions.
4.7.1.2.2	Planned urban development road improvements to incorporate Active travel elements as appropriate, having due to regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality, and opportunities to promote nature based solutions.	Active travel elements to be assessed and included if appropriate in planned urban developments / road improvements etc., having due to regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites and local air quality, and opportunities to promote nature based solutions.
4.7.1.2.3	Continue the ongoing development of Greenways, such as Midleton - Youghal Greenway.	Continue the ongoing development of Greenways, such as Midleton - Youghal Greenway, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality, and opportunities to promote nature based solutions.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
4.7.1.2.5	Work with relevant authorities in the development of "Safe route to schools".	Work with relevant authorities in the development of "Safe route to schools", having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality, and opportunities to promote nature based solutions.
4.7.1.3.2	Align population and employment growth through integration of land use and transport planning.	Align population and employment growth through integration of land use and transport planning, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.7.1.4.1	Work with the relevant stakeholders in the development of the proposed National EV charging network within County Cork.	Work with the relevant stakeholders in the development of the proposed National EV charging network within County Cork, whilst promoting the need to consider environmental protection requirements and disability access during such projects.
4.7.1.4.2	Engage with ESB to identify areas where the electricity network infrastructure can support EV charging	Engage with ESB to identify areas where the electricity network infrastructure can support EV charging, whilst promoting the need to consider environmental protection requirements during supported infrastructure projects.
4.7.1.4.4	Promote the use of e-vehicles through the provision of e-vehicle charge point requirements in planning applications.	Promote the use of e-vehicles through the provision of e-vehicle charge point requirements in planning applications whilst promoting the need to consider environmental protection requirements and disability access during such projects.
4.7.1.4.5	Promote the use of low emission fuels.	Promote the use of sustainably sourced low emission fuels.
4.9.1.1.5	Work with stakeholders to expand the use of Regulation 28 end of waste criteria	Work with stakeholders to expand the use of Regulation 28 end of waste criteria in compliance with the provisions of the Waste Management Act.
4.9.1.1.6	Promote and support the operation of Regulation 27 By product regulation to reduce waste disposal.	Promote and support the operation of Regulation 27 By product regulation to reduce waste disposal in compliance with the provisions of the Waste Management Act.
4.9.1.3.1	Manage Closed landfills to minimise emissions	Manage Closed landfills to minimise emissions, whilst promoting compliance with environmental protection requirements associated with closed landfill sites.
4.9.1.3.2	Work with stakeholders to remediate and manage historic landfills	Work with stakeholders to remediate and manage historic landfills, whilst promoting compliance with environmental protection requirements associated with closed landfill sites.
4.9.1.3.3	Work with stakeholders to reduce emissions from treatment of leachate	Work with stakeholders to reduce emissions from treatment of leachate, having due regard to planning and environmental protection considerations.
4.9.1.4.1	Promote civic amenity sites as alternative to kerbside collection for proper disposal of waste	Promote civic amenity sites as alternative to kerbside collection for proper disposal of waste - having due regard to planning and environmental protection/nuisance considerations in relation to such sites.
4.9.1.4.2	Promote bring banks for disposal of glass containers and food cans	Promote bring banks for disposal of glass containers and food cans - having due regard to planning and environmental protection/nuisance considerations in relation to such sites.
4.8.1.1.1	Support sustainable offshore wind energy projects at appropriate locations and scales & the development of associated infrastructure at ports to facilitate these developments in accordance with the CDP.	Support sustainable offshore wind energy projects at appropriate locations and scales & the development of associated infrastructure at ports to facilitate these developments in accordance with the CDP - whilst promoting the need to consider environmental protection requirements at the outset of and during such projects.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
4.8.1.1.2	Promote renewable energy generation, storage, and distribution infrastructure in accordance with the CDP within the county.	Promote renewable energy generation, storage, and distribution infrastructure in accordance with the CDP within the countys - whilst promoting the need to consider environmental protection requirements at the outset of and during such projects.
4.8.1.2.1	Explore opportunities for establishing district heating to serve council assets including social housing in the county.	Explore opportunities for establishing district heating to serve council assets including social housing in the county, ensuring appropriate regard is had to planning and environmental protection considerations.
4.8.1.2.2	Support stakeholders who wish to develop district heating systems.	Support stakeholders who wish to develop district heating systems, whilst promoting the need to consider environmental protection requirements at the outset of and during such projects.
4.8.1.3.1	Support and implement national policy on EV charging at nondomestic locations.	Support and implement national policy on EV charging at nondomestic locations, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.8.1.3.2	Engage with ESB to identify locations where electricity network infrastructure can support EV charging facilities.	Engage with ESB to identify locations where electricity network infrastructure can support EV charging facilities, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.8.1.3.3	Develop and implement a policy for EV Charging as part of a wider Taking in Charge policy.	Develop and implement a policy for EV Charging as part of a wider Taking in Charge policy, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.8.3.1.1	Promote the retention and reuse of existing building stock as a first preference.	Promote the retention and reuse of existing building stock as a first preference - having due regard for environmental sensitivities such as local human receptors, European sites and biodiversity; protected species, and the need to appropriately protect and conserve protected structures, during any retrofitting works
4.8.3.1.2	Support provision of information on grant aid for homes and businesses	Support provision of information on grant aid for homes and businesses - whilst promoting the need to consider environmental protection requirements during such projects.
4.8.3.1.3	Encourage energy efficiency improvements for buildings. Advise and educate businesses, residents on energy efficiency	Encourage energy efficiency improvements for buildings. Advise and educate businesses, residents on energy efficiency - whilst promoting the need for projects to conform with relevant planning policy environmental protection criteria.
4.8.3.3.1	Support provision of information on grant aid for onsite renewable generation	Support provision of information on grant aid for onsite renewable generation - whilst promoting the need to consider environmental protection requirements during such projects.
4.8.3.3.2	Encourage onsite renewable generation installation	Encourage onsite renewable generation installation - whilst promoting the need to consider environmental protection requirements during such projects.
4.8.4.1.1	Develop a design ethos that considers climate action in the development of new buildings by Cork County Council or on its behalf. This approach will consider a range of design options including, but not restricted to the use of low carbon materials, building fabric insulation, green roofs, solar photovoltaics, and rainwater harvesting, taking account of	Develop a design ethos that considers climate action in the development of new buildings by Cork County Council or on its behalf. This approach will consider a range of design options including, but not restricted to the use of low carbon materials, building fabric insulation, green roofs, solar photovoltaics, and rainwater harvesting, taking account of government policy, design standards and guidelines. Climate action co-benefits and environmental protection requirements shall be appropriately promoted be supported by the design ethos.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
	government policy, design standards and guidelines.	
4.8.4.1.2	Prepare and implement an annual funding program for deep energy retrofitting of existing Council housing stock	Prepare and implement an annual funding program for deep energy retrofitting of existing Council housing stock, having due regard for environmental sensitivities such as local human receptors, European sites and biodiversity; protected species, and the need to appropriately protect and conserve protected structures, during any retrofitting works
4.8.4.1.3	Phase out all fossil fuel-based heating systems by 2030	Phase out all fossil fuel-based heating systems by 2030, having due regard to environmental sensitivities such as local human receptors, protected species associated with such buildings, European sites and biodiversity.
4.8.4.1.4	Refurbish all newly acquired and vacant houses to a minimum B2 energy rating, with all fossil fuel heating sources removed	Refurbish all newly acquired and vacant houses to a minimum B2 energy rating, with all fossil fuel heating sources removed, having due regard to environmental sensitivities such as protected species associated with such buildings, European sites and biodiversity.
4.8.4.1.6	Run a pilot rainwater harvesting retrofit project in an existing Council housing estate in the Decarbonisation Zone.	Run a pilot rainwater harvesting retrofit project in an existing Council housing estate in the Decarbonisation Zone, while ensuring projects have appropriate regard to local environmental sensitivities such as the receiving water environment, biodiversity and European sites.
4.8.4.2.1	Advance installation of underground infrastructure for EV Charging in new social housing estates	Advance installation of underground infrastructure for EV Charging in new social housing estates, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.8.4.2.4	Undertake a review of existing estates to identify potential locations for installation of communal EV charging points and bike parking.	Undertake a review of existing estates to identify potential locations for installation of communal EV charging points and bike parking, having due regard to environmental sensitivities such as the receiving water environment, biodiversity, European sites, and local air quality.
4.8.5.1.2	Work with communities to adopt local adaptation measures that reduce local weather impacts considering intensity, duration, and frequency.	Work with communities to adopt local adaptation measures that reduce local weather impacts considering intensity, duration, and frequency, having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.
4.8.5.2.1	Develop & implement SUDS & nature-based approaches to manage surface water and protect rivers from pollutants in road water run-off and slow the addition of water volume to mitigate flooding for development projects	Develop & implement SUDS & nature-based approaches to manage surface water and protect rivers from pollutants in road water run-off and slow the addition of water volume to mitigate flooding for development projects. Ensure due regard is given environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology, during any supported development projects.
4.8.5.2.2	Undertake rainwater management planning for all main towns. Assist Planning Policy Unit to develop a rainwater management plan for Urban settlements	Undertake rainwater management planning for all main towns. Assist Planning Policy Unit to develop a rainwater management plan for Urban settlements, having due regard to the need to promote nature based solutions and Sustainable Drainage Systems, and environmental sensitivities, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.
4.8.5.2.3	Support the roll out of Flood Relief Schemes in the County, including those in partnership with the OPW, as identified through the Catchment Flood Risk Assessment and Management (CFRAMS) Programme	Support the roll out of Flood Relief Schemes in the County, including those in partnership with the OPW, as identified through the Catchment Flood Risk Assessment and Management (CFRAMS) Programme and in the County Strategic Flood Risk Assessment - having due regard to the need to promote nature-based solutions and Sustainable Drainage Systems, and environmental sensitivities at these locations, including water quality, biodiversity, European sites, riparian corridors and aquatic ecology.

Draft LACAP Action Reference	Draft LACAP Action	Mitigation Measure
	and in the County Strategic Flood Risk Assessment.	
4.8.5.3.1	Assess bridge infrastructure in line with predicted climate impacts.	Assess bridge infrastructure in line with predicted climate impacts, having due regard to the need to appropriately protect, conserve and enhance important habitats and species and European sites, and the conservation status of protected bridges.
4.8.5.3.2	Carry out road maintenance and rehabilitation of regional and local roads in accordance with the guidance document on the climate adaptation of regional and local roads	Carry out road maintenance and rehabilitation of regional and local roads in accordance with the guidance document on the climate adaptation of regional and local roads, having due regard to environmental sensitivities, including water quality, biodiversity, riparian corridors and air quality.

Table 8-2: Environmental Mitigation Measures related Environmental Governance Principles suggested for inclusion in the plan - specifically the plan implementation section

Promote climate action projects that support and maximize environmental co-benefits, such as biodiversity protection and enhancement; improved air, water or soil quality; or enhanced recreation, amenity and cultural heritage value, to ensure win-win benefits are gained.
Support or facilitate climate action related projects and initiatives which seek to make improvements in soil structure, management and health by increasing soil organic carbon - which will create the environmental co-benefits of improving flood resilience by enhancing water holding capacity of soils and increasing the level of GHG sequestration associated with land use functions.
Ensure all development underpinned or supported by climate action is planned and implemented in a manner that appropriately considers the potential for environmental co-benefits, potential environmental impacts and environmental protection requirements.
Flood projects, or related maintenance works, shall be carried out in a manner that promotes climate action-biodiversity related co-benefits, and shall have due regard for the protection and enhancement of rare, protected or important habitats and species.
Ensure climate action related projects are carried out in a manner that promotes climate action-cultural heritage co-benefits, and do not result in unauthorized physical damage to cultural, archaeological or architectural features, or unauthorized or inappropriate alteration of the context of sensitive cultural heritage features.
Ensure climate action related projects are carried out in a manner that promotes climate action water quality co-benefits, and align with the provisions of the Water Framework Directive and relevant River Basin Management Plan.
Promote climate action projects that support protected trees, hedgerows and other habitats such as wetlands, flood zones which contribute to green infrastructure.
Support opportunities to improve ecological connectivity of non-designated habitats and sites to improve overall ecosystem resilience and functioning while supporting climate action within the county.
Ensure all projects supported by the council have taken the necessary precautions to identify and manage invasives species, particularly with regard to Schedule III species. No climate action related development project that is likely to cause the spread of invasives species listed in Schedule III shall be supported.

8.3 Mitigation through consideration of environmental protection objectives contained in the County Development Plan

In addition to the environmental mitigation measures integrated into the Draft LACAP, the development management standards and environmental protection measures defined in the CDP will serve to mitigate the environmental effects of any development proposals supported by the Draft LACAP. These development management standards/environmental protection measures have been defined for the express purpose of ensuring proper planning and sustainable development in the County. The CDP has been subject to its own SEA and AA. The Draft LACAP has been prepared having appropriate regard to the policies and objectives contained in the County Development Plan.

8.4 Conclusion

The reasonable alternative evaluation presented in Section 6 and summarised in Section 8.1 has resulted in the development of a Draft LACAP that achieves the best environmental outcomes in comparison to other reasonable alternative considered.

The adoption of the mitigation measures to be integrated into the Draft LACAP, in combination with the continued adoption of the development planning and control related environmental protection measures defined in the CDP will prevent, reduce and as fully as possible offset any potential negative environmental effects due to the implementation of the Draft LACAP. No further mitigation measures are required for the Draft LACAP.

9. MONITORING MEASURES

The SEA Directive requires that the environmental effects of the implementation of a plan are monitored in order *'to identify at an early stage unforeseen effects, and to be able to undertake appropriate remedial action.'*

A series of indicators and targets have been established for identified SEOs to enable ongoing monitoring and measurement of LACAP implementation performance, the environmental effects of the implementation of the LACAP and the efficacy of environmental mitigation measures. Such monitoring will be carried out regularly to support plan implementation.

SEO indicators are simple and effective quantifiable indicators used to measure the environmental effects of implementing the Draft LACAP and the progress of SEO objectives and targets. SEO targets set focussed, measurable aims and thresholds that the Draft LACAP can support the achievement of.

Monaghan County Council are responsible for implementation of the SEA monitoring programme. The environmental effects (including positive, negative and cumulative effects) of LACAP implementation will be monitored once every year over the course of the plan's five-year lifetime. This monitoring will be carried out by the Environment and Climate Change section of Monaghan County Council who will report on progress and performance the relevant SPC annually. A monitoring report will be prepared to document monitoring outcomes. This report shall be made available for public inspection.

It is recommended that LACAP monitoring and review is undertaken in parallel with CDP monitoring and review processes for efficiency and given that similar data sets will be used to measure the progress of each plan.

Where monitoring identifies that the implementation of the LACAP is having a significant negative environmental effect, an in-depth review of the LACAP should take place and the LACAP should be updated in a manner that satisfactorily mitigates these environmental effects (i.e., through the adoption of additional environmental mitigation measures.). Similarly, where monitoring indicates that potential positive environmental effects associated with LACAP implementation are not being adequately realised, the LACAP should be reviewed and updated in a manner that supports the realisation of all potential positive environmental effects, having regard to the overall vision and high-level goals of the plan.

The SEA Monitoring Programme established for the Draft LACAP is contained in Table 9-1. This monitoring programme has been developed in accordance with EPA guidelines entitled 'Guidance on SEA Statements and Monitoring' (2020). The monitoring programme includes detail on the indicators, targets and data sources used to monitor and measure progress.

A stand-alone monitoring report on the significant environmental effects of the implementation of the Plan will be prepared in advance of the plan review process. The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of remedial action.

Table 9-1: SEA Monitoring Programme

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.	Lower-level plan and project accordance with the plan.	Require all lower-level plans and projects have appropriate regard to and appropriately support all action and development proposals defined in the Plan. Require that all development projects in the County appropriately align and accord with action defined in the Plan.	Review of Local Area Plans. Internal monitoring of likely significant environmental effects of development projects.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.	Number of spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan.	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan.	Consultation with the Health Service Executive (HSE) and the EPA.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.	Compliance of action and development supported by the plan with policies and land use objectives protective/supportive of economic development in the county defined in the County Development Plan (CDP) or County Local Area Plans.	No contravention of policies and land use objectives protective/supportive of economic development in the county defined in the CDP or County Local Area Plans. Planning permission for development proposals supported by the plan only to be granted where development complies with policies protective/supportive of economic development.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.	Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in Chapter 'Green Infrastructure and Biodiversity' of the CDP.	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in Chapter 'Green Infrastructure and Biodiversity' of the CDP. Ensure no habitats are impacted by the effects of climate change.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of compliance with the County Biodiversity Action Plan. Internal monitoring of likely significant environmental effects of development projects.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			Condition of habitats impacted by climate change (Area km^2 /length metres). Number and geographical distribution of Species or Species population trends impacted by climate change. Compliance of action and development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.	Ensure no reduction in the number of geographic distribution of species as a result of climate change effects. No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan. Planning permission for development proposals supported by the plan only to be granted where development complies with policy supporting biodiversity protection and enhancement.	
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species[71].	Condition of European Sites and annexed species.	No adverse impacts on the condition of European Sites and Annexed habitats and species as a result of plan implementation.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the NPWS. Department of Housing, Local Government and Heritage report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive. Department of Housing, Local Government and Heritage's National Birds Directive Monitoring Report for the Birds Directive under Article 12.

[71] 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.	Condition of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora. Linear meters of riparian corridors enhanced with native planting. Fragmentation or breaks in continuity of habitats and loss of wildlife corridors, stepping stones and connectivity (km^2). Number of developments permitted that have significant greenspace proposals.	No adverse impacts on the condition of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora as a result of plan implementation. Increase linear metres of riparian corridor enhanced with native planting. Reduce habitat fragmentation or breaks. Increase number of developments permitted that have significant greenspace proposals.	Internal monitoring of likely significant environmental effects of development projects.
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.	Condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites. Status of listed species in the Wildlife Acts 1976 - 2012.	No adverse impacts on condition of semi-natural habitats, species, environmental features or other sustaining resources in designated national sites as a result of plan implementation. No adverse impacts on listed species in the Wildlife Acts 1976 - 2012 as a result of plan implementation.	Internal monitoring of likely significant environmental effects of development projects. Mapping of LR important habitats and species as part of the County Biodiversity Plan.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, in response to the biodiversity emergency.	Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in Chapter 'Green Infrastructure and Biodiversity' of the CDP. No. of developments permitted that have significant greenspace proposals.	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in Chapter 'Green Infrastructure and Biodiversity' of the CDP. Increase number of developments permitted that have significant greenspace proposals. Increase quantum of improved biodiversity areas.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of compliance with the County Biodiversity Action Plan. Internal monitoring of likely significant environmental effects of development projects.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			Improved biodiversity areas (Area km^2 /length metres). Compliance of development supported by the plan with policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan.	No contravention of policies providing for the protection and enhancement of Biodiversity and flora and fauna defined in the County's Biodiversity Action Plan. Planning permission for development proposals supported by the plan only to be granted where development complies with policy supportive of biodiversity protection and enhancement.	
Landscape, Seascape & Visual Amenity	L1	Avoid or, minimise impacts to statutory landscape designations defined in the CDP.	Status of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects. Number of developments permitted that result in avoidable adverse impacts on Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects.	All action and development proposals supported by the plan must comply with policy objectives relating to the protection of Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects defined in the CDP. No development supported by the plan should have an adverse impact on Landscape Character Areas, the Seascape, High Amenity Zones, Historic Landscape Character Areas and Views and Prospects.	Internal monitoring of compliance with CDP Policy Objectives. Internal monitoring of likely significant environmental effects of development projects.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.	Number of developments permitted that result in avoidable adverse visual impacts on residential receptors or other sensitive visual receptors.	No development supported by the plan should have a significant adverse visual impact on residential receptors or other sensitive visual receptors. All development supported by the plan should adhere to relevant Development Management Standards defined in the CDP, in particular standards defined in	Internal monitoring of likely significant environmental effects of development projects.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
				relation to physical and visual impacts.	
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).	Percentage of features contained in the RMP (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan. Percentage of features contained in the RPS and NIAH (and, where relevant, the associated surrounding context) protected from adverse effects due to action and development occurring as a result of this plan.	No features contained in the RMP (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan. No features contained in the RPS and NIAH (nor the associated surrounding context) should be significantly adversely affected as a result of the implementation of this plan.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media
Soils	S1	Avoid or minimise effects on mineral resources or soils.	Number of instances of significant adverse impacts on mineral resources or soils occurring, including the pollution, loss or degradation of mineral resources or soils, as a result of action and development supported by the plan.	No instances of significant adverse impacts on mineral resources or soils occurring as a result of action and development supported by the plan.	Internal monitoring of likely significant environmental effects of development projects.
Land Use	LU1	Avoid or minimise effects on existing land use.	Number of instances of significant adverse impacts on existing land use as a result of plan implementation.	No instances of significant adverse impacts on existing land use as a result of plan implementation.	Internal monitoring of likely significant environmental effects of development projects.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.	% change in modal split. Length of new sustainable transport routes developed.	Reduction in private car use. Extension and improvement of the sustainable transport network in the plan area.	Central Statistics Office (CSO) Population data - Commuting in Ireland. Internal monitoring of length of new sustainable transport routes developed.
	AQN2	Avoid or minimise effects on local air quality.	Number of developments permitted that result in avoidable adverse air quality impacts on sensitive receptors.	No development supported by the plan should have a significant adverse air quality impact on sensitive receptors.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
			Number of exceedances of ambient air quality standards in the County, as monitored under the EPA's National Ambient Air Quality Monitoring Network.	All development supported by the plan should adhere to relevant Development Management Standards defined in the CDP relating to the protection of air quality. Minimise ambient air quality standard exceedances in the County.	Review of EPA Air Quality Monitoring undertaken in the County.
	AQN3	Avoid or minimise adverse noise impacts.	Number of sensitive receptors exposed to noise nuisance.	No sensitive receptors exposed to nuisance noise in the County.	Internal monitoring of likely significant environmental effects of development projects. Monitoring of internal noise complaint investigations undertaken. Consultation with the EPA.
Water	W1	Maintain and/or improve, the quality and status of surface waters.	Status of surface water bodies as reported by the EPA Water Monitoring Programme for the Water Framework Directive (WFD) Status of bathing waters as monitored under the Bathing Water Directive.	Number of Pollution Incidents detected due to poor bathing water quality results. Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status.' No deterioration in the status of any bathing waters, having appropriate regard to bathing water mandatory and guidelines values defined in the Bathing Water Directive. Implementation of the objectives of the second cycle of the national River Basin Management Plan.	EPA surface water monitoring data and reports. EPA bathing water monitoring data and reports.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.	Status of groundwater bodies as reported by the EPA National Groundwater Monitoring Programme for the WFD.	No deterioration in the status of groundwater quality, having appropriate regard to Groundwater Quality Standards and Threshold Values defined under Directive 2006/118/EC.	EPA groundwater monitoring data and reports.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.	Number of instances of significant adverse impact on surface water or groundwater bodies resulting in a reduction in water quality or the ability of a water body to achieve 'good' water quality status.	No instances of significant adverse impact on surface water or groundwater bodies resulting in a reduction in water quality or the ability of a water body to achieve 'good' water quality status.	Internal monitoring of likely significant environmental effects of development projects. Consultation with the EPA.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.	Number of incompatible developments (supported by the plan) permitted within flood risk areas.	Minimise developments (supported by the plan) granted permission on lands which pose - or are likely to pose in the future - a significant flood risk, having appropriate regard to the Flood Risk Management guidelines.	Internal monitoring of development projects granted planning permission.
	W5	Prevent impact upon drinking water quality	Number of non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023.	No non-compliances with Drinking Water Quality Standards defined in the European Union (Drinking Water) Regulations 2023.	EPA Drinking Water Quality Reports.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure	Number of incompatible developments (supported by the plan) adversely affecting built/amenity assets and infrastructure.	No incompatible development (supported by the plan) adversely affecting built/amenity assets and infrastructure.	Internal monitoring of likely significant environmental effects of development projects.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.	Number of incompatible developments (supported by the plan) adversely affecting existing or planned infrastructure, including water supply, wastewater management, energy and transport infrastructure.	No incompatible development (supported by the plan) adversely affecting existing or planned material assets infrastructure.	Internal monitoring of likely significant environmental effects of development projects, including monitoring of effects on other future planned or committed material asset infrastructure projects. Consultation with Irish Water, Gas Networks Ireland, ESB Networks and Transport Infrastructure Ireland.

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
	MAI3	Promote sustainable transportation.	% change in modal split. Kilometres of permanent segregated cycling network. Kilometres of permanent integrated cycling network. Number of Electric Vehicle charging points in the county. Total Area of road reallocated for sustainable alternatives (m^2).	Percentage increase in the number of public transport users in the County Increase kilometres of permanent segregated cycling network. Increase kilometres of permanent segregated cycling network. Increase number of Electric Vehicle charging points in the county. Increase Total Area of road reallocated for sustainable alternatives.	CSO Population data - Commuting in Ireland. Internal monitoring of length of new sustainable transport routes developed.
	MAI4	Promote sustainable waste management.	Tonnes of hazardous waste received at Council Waste Management Facilities annually. Tonnes of W.E.E.E. waste received at Council Waste Management Facilities annually. Tonnes of Bulky waste received at Council Waste Management Facilities annually. Tonnes of garden waste received at Council Waste Management Facilities annually.	Increase waste recycling in the County. Reduce waste generation in the County.	EPA Waste Statistics. Consultation with the EPA.
	MAI5	Promote sustainable water use and drainage management.	Level of water use in the County. Compliance with Sustainable Drainage System (SuDS) related development management standards defined in the CDP.	Reduced water use in the county. All development (supported by the plan) must comply with SuDS related development management standards defined in the CDP.	CSO water consumption data. Internal monitoring of flood risk associated with of development projects and development project compliance with relevant flood risk and management related development management standards.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.	Visitor trips to local authority functional area	Stable or increasing number of visitor trips to local authority functional area	Fáilte Ireland Data on Tourism Performance

Environmental Component	SEO Code	Strategic Environmental Objective	Indicators	Targets	Data Source
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.	Level of Greenhouse Gas (GHG) emissions in the County. Level of renewable energy infrastructure in the County.	Reduce GHG emissions associated with the Energy sector in the County. Increase the level of renewable energy infrastructure in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County. Megawatt hour (MWh) output from renewable energy infrastructure in the county.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.	Level of GHG emissions in the County	Reduce GHG emissions for all sectors in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.	Level of GHG emissions in the County. Level of GHG emissions in the Decarbonising Zone. Net addition of tree cover added.	Reduce GHG emission in the County to Net Zero. Reduce Decarbonising Zone GHG emissions to Net Zero. Increase level of tree cover in the County.	EPA National Emission Inventory. Baseline Emission Inventory for the County. Baseline Emission Inventory for the Decarbonising Zone.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.	Level of GHG emissions in the Decarbonising Zone.	Reduce Decarbonising Zone GHG emissions to Net Zero.	Baseline Emission Inventory for the Decarbonising Zone.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change	Number of blue and green infrastructure measures included as part of development projects that have been granted planning permission.	Increase the number of blue and green infrastructure measures included as part of development projects that have been granted planning permission.	Review of granted planning permissions.

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING,
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APPENDIX 1

Relationship of the Plan with other relevant Plans and Programmes

This appendix is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Level			
SEA Directive (2001/42/EC)	• Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development. • Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment.	• Carry out and environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive. • Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission. • Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects. • Inform relevant authorities and stakeholders on the decision to implement the plan or programme. • Issue a statement to include requirements detailed in Article 9 of the Directive. • Monitor and mitigate significant environmental effects identified by the assessment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EIA Directive (2011/92/EU as amended by 2014/52/EU)	• Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment. • Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4.	• All projects listed in Annex I are considered as having significant effects on the environment and require an EIA. • For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. • The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor. • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Habitats Directive (92/43/EEC)	• Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora. • Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora.	• Propose and protect sites of importance to habitats, plant and animal species. • Establish a network of European sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range. • Carry out comprehensive assessment of habitat types and species present.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of community interest. • Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements.	• Establish a system of strict protection for the animal species and plant species listed in Annex IV.	
Birds Directive (2009/147/EC)	• Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats. • Protect, manage and control these species and comply with regulations relating to their exploitation. • The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution.	• Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. • Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas). • Ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes. • Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and • particularly wetlands of international importance.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Bathing Water Directive (revised) 2006 [2006/7/EC]	• The purpose of this Directive is to preserve, protect and improve the quality of the environment and to protect human health by complementing Directive 2000/60/EC	This Directive lays down provisions for: • the monitoring and classification of bathing water quality; • the management of bathing water quality; and	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• the provision of information to the public on bathing water quality	combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Nitrates Directive (91/676/EC)	• Reducing water pollution caused or induced by nitrates from agricultural sources and - preventing further such pollution.	Ireland's Nitrates Action Programme is designed to prevent pollution of surface waters and ground water from agricultural sources and to protect and improve water quality. Ireland's third NAP came into operation in 2014. Each Member State's NAP must include: • a limit on the amount of livestock manure applied to the land each year • set periods when land spreading is prohibited due to risk • set capacity levels for the storage of livestock manure	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Integrated Pollution Prevention Control Directive (2008/1/EC)	• The purpose of this Directive is to achieve integrated prevention and control of pollution arising from the activities listed in Annex I. It lays down measures designed to prevent or, where that is not practicable, to reduce emissions in the air, water and land from the abovementioned activities, including measures concerning waste, in order to achieve a high level of protection of the environment taken as a whole, without prejudice to Directive 85/337/EEC and other relevant Community provisions.	The IPPC Directive is based on several principles: • an integrated approach • best available techniques, • flexibility; and • public participation	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EU Plant Protection (products) Directive 2009/127/EC	• The Directive aims at reducing the risks and impacts of pesticide use on human health and • the environment by introducing different targets, tools and measures such as Integrated Pest • Management (IPM) or National Action Plans (NAPs).	• The Framework Directive applies to pesticides which are plant protection products. • Regarding pesticide application equipment already in professional use, the Framework Directive introduces requirements for the inspection and maintenance to be carried out on such equipment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Renewables Directive (2009/28/EC)	• The Renewable Energy Directive establishes an overall policy for the production and promotion of energy from renewable sources in the EU. • It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets. • All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.	• The Directive promotes cooperation amongst EU countries (and with countries outside the EU) to help them meet their renewable energy targets. • The Directive specifies national renewable energy targets for each country, taking into account its starting point and overall potential for renewables. • EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans. • Progress towards national targets is measured every two years when EU countries publish national renewable energy • progress reports.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Indirect Land Use Change Directive (2012/0288(COD))	• Article 3(4) of Directive 2009/28/EC of the European Parliament and of the Council (3) requires Member States to ensure that the share of energy from renewable energy sources in all forms of transport in 2020 is at least 10 % of their final energy consumption. • The blending of biofuels is one of the methods available for Member States to meet this target, and is expected to be the main contributor. • Other methods available to meet the target are the reduction of energy consumption, which is imperative because a mandatory percentage target for energy from renewable sources is likely to become increasingly difficult to achieve sustainably if overall demand for energy for transport continues to rise, and the use of electricity from renewable energy • sources.	• Limit the contribution that conventional biofuels (with a risk of ILUC emissions) make towards attainment of the targets in the Renewable Energy Directive; • Improve the greenhouse gas performance of biofuel production processes (reducing associated emissions) by raising the greenhouse gas saving threshold for new installations subject to protecting installations already in operation on 1st July 2014; • Encourage a greater market penetration of advanced (low- ILUC) biofuels by allowing such fuels to contribute more to the targets in the Renewable Energy Directive than conventional biofuels; • Improve the reporting of greenhouse gas emissions by obliging Member States and fuel suppliers to report the estimated indirect land-use change emissions of biofuels.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Alternative Fuels Infrastructure Directive (2014/94/EU)	• This Directive establishes a common framework of measures for the deployment of alternative fuels infrastructure in the Union in order to minimise dependence on oil and to mitigate the environmental impact of transport.	• This Directive sets out minimum requirements for the building-up of alternative fuels infrastructure, including recharging points for electric vehicles and refuelling points for natural gas (LNG and CNG) and hydrogen, to be implemented by means of Member States' national policy frameworks, as well as common technical specifications for such recharging and refuelling points, and user information requirements.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
EU Energy Efficiency Directive (2012/27/EU)	• Establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. • Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain, from production to final consumption.	• Energy distributors or retail energy sales companies have to achieve 1.5% energy savings per year through the implementation of energy efficiency measures • EU countries can opt to achieve the same level of savings through other means, such as improving the efficiency of heating systems, installing double glazed windows or insulating roofs • The public sector in EU countries should purchase energy efficient buildings, products and services • Every year, governments in EU countries must carry out energy efficient renovations on at least 3% (by floor area) of the buildings they own and occupy • Energy consumers should be empowered to better manage consumption. This includes easy and free access to data on consumption through individual metering • National incentives for SMEs to undergo energy audits • Large companies will make audits of their energy consumption to help them identify ways to reduce it • Monitoring efficiency levels in new energy generation capacities.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
EU Seveso Directive (2012/18/EU)	• This Directive lays down rules for the prevention of major accidents which involve dangerous substances, and the limitation of their consequences for human health and the environment, with a view to ensuring a high level of protection throughout the Union in a consistent and effective manner.	• The Seveso Directive is well integrated with other EU policies, thus avoiding double regulation or other administrative burden. This includes the following related policy areas: • Classification, labelling and packaging of chemicals; • The Union's Civil Protection Mechanism; • The Security Union Agenda including CBRN-E and Protection of critical infrastructure; • Policy on environmental liability and on the protection of the environment through criminal law; • Safety of offshore oil and gas operations.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU Maritime Spatial Planning Directive (2014/89/EU)	• This Directive establishes a framework for maritime spatial planning aimed at promoting the sustainable growth of maritime economies, the sustainable development of marine areas and the sustainable use of marine resources.	• Each Member State shall establish and implement maritime spatial planning. • In doing so, Member States shall take into account land-sea interactions. • The resulting plan or plans shall be developed and produced in accordance with the institutional and governance levels determined by Member States. This Directive shall not interfere with Member States' • competence to design and determine the format and content of that plan or those plans. • Maritime spatial planning shall aim to contribute to the objectives listed in Article 5 and fulfil the requirements laid down in Articles 6 and 8.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• When establishing maritime spatial planning, Member States shall have due regard to the particularities of the marine regions, relevant existing and future activities and uses and their impacts on the environment, as well as to natural resources, and shall also take into account land-sea interactions. • Member States may include or build on existing national policies, regulations or mechanisms that have been or are being established before the entry into force of this Directive, provided they are in conformity with the • requirements of this Directive.	
UK Marine Policy Statement	• Achieving a sustainable marine economy • Ensuring a strong, healthy and just society • Living within environmental limits • Promoting good governance • Using sound science responsibly	The MPS will facilitate and support the formulation of Marine Plans, ensuring that marine resources are used in a sustainable way in line with the high level marine objectives and thereby: • Promote sustainable economic development; • Enable the UK's move towards a low-carbon economy, in order to mitigate the causes of • climate change and ocean acidification and adapt to their effects; • Ensure a sustainable marine environment which promotes healthy, functioning marine ecosystems and protects marine habitats, species and heritage assets; and • Contribute to the societal benefits of the marine area, including the sustainable use of marine resources to address local social and economic issues	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Marine and Coastal Access Act 2009	• Aims to provide the legal mechanism to help ensure clean, healthy, safe, productive and biologically diverse oceans and seas by putting in place a new system for improved management and protection of the marine and coastal environment.	The Marine Act comprises eight key elements: • Marine Management Organisation (MMO) • Strategic Marine Planning System • Streamlined Marine Licensing System • Marine Nature Conservation • Fisheries Management and Marine Enforcement • Migratory and Freshwater Fisheries • Coastal Access • Coastal and Estuarine Management	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Marine (Northern Ireland) Act 2013	• Aims to provide for marine plans in relation to the Northern Ireland inshore region; to provide for marine conservation zones in that region; to make further provision in relation to marine licensing for certain electricity works in that region; and for connected purposes.	The Marine Act sets out a new framework for Northern Ireland's seas based on: a system of marine planning that will balance conservation, energy and resource needs; improved management for marine nature conservation and the streamlining of marine licensing for some electricity projects. The main provisions of the Act are outlined below: • Marine Planning • Nature Conservation • Marine Licensing	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Union Biodiversity Strategy to 2020	• Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy. • Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible.	• Outlines six targets and twenty actions to aid European Union in halting the loss to biodiversity and eco-system services. • The six targets cover: o Full implementation of EU nature legislation to protect biodiversity o Maintaining, enhancing and protecting for ecosystems, and green infrastructure	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		o Ensuring sustainable agriculture, and forestry o Sustainable management of fish stocks o Reducing invasive alien species o Addressing the global need to contribute towards averting global biodiversity loss	environmental protection and management.
Biodiversity Strategy for 2030 - Bringing nature back into our lives (European Commission, 2020)	The EU's biodiversity strategy for 2030 is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems. The strategy aims to put Europe's biodiversity on a path to recovery by 2030, and contains specific actions and commitments.	The Strategy contains specific commitments and actions to be delivered by 2030, including: • Establishing a larger EU-wide network of protected areas on land and at • sea, building upon existing Natura 2000 areas, with strict protection for areas of very high biodiversity and climate value. • An EU Nature Restoration Plan - a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss. • A set of measures to enable the necessary transformative change: setting in motion a new, strengthened governance framework to ensure better implementation and track progress, improving knowledge, financing and investments and better respecting nature in public and business decision making. • Measures to tackle the global biodiversity challenge, demonstrating that the EU is ready to lead by example towards the successful adoption of an ambitious global biodiversity framework under the Convention on Biological Diversity.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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EU Green Infrastructure Strategy	Aims to create a robust enabling framework in order to promote and facilitate Green Infrastructure (GI) projects.	• Promoting GI in the main EU policy areas. • Supporting EU-level GI projects. • Improving access to finance for GI projects. • Improving information and promoting innovation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UNESCO (1972) The Convention for the Protection of the World Cultural and Natural Heritage	• links concepts of nature conservation and the preservation of cultural properties; and • recognizes the way in which people interact with nature, and the fundamental need to preserve the balance between the two.	• sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving them; • each country pledges to conserve not only the World Heritage sites situated on its territory, but also to protect its national heritage; • encourages to integrate the protection of the cultural and natural heritage into regional planning programmes, set up staff and services at their sites, undertake scientific and technical conservation research and adopt measures which give this heritage a function in the day-to-day life of the community.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management
UN (1992) The Convention on Biological Diversity	An overall objective is to develop national strategies for the conservation and sustainable use of biological diversity.	The Convention has three main goals: • the conservation of biological diversity (or biodiversity); • the sustainable use of its components; and	Where new land use developments or activities occur as a result of this legislation,

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• the fair and equitable sharing of benefits arising from genetic resources.	plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
UN (1992) Framework Convention on Climate Change	It is aimed at stabilising greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.	The Convention acknowledges the vulnerability of all countries to the effects of climate change and calls for special efforts to ease the consequences, especially in developing countries which lack the resources to do so on their own.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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UN Kyoto Protocol (2nd Kyoto Period), the Second European Climate Change Programme (ECCP II), Paris climate conference (COP21) 2015 (Paris Agreement)	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions. The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol. At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal. The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C.	• The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II). • EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP. • Under COP21, governments agreed to come together every 5 years to set more ambitious targets as required by science; report to each other and the public on how well they are doing to implement their targets; track progress towards the long-term goal through a robust transparency and accountability system.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2020 Climate and Energy Package	• Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020. • Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels. • Aims to raise the share of EU energy consumption produced from renewable resources to 20%. • Achieve a 20% improvement in the EU's energy efficiency.	Four pieces of complimentary legislation: • Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps. • Member States have agreed national targets for non-EU ETS emissions from countries outside the EU. • Meet the national renewable energy targets of 16% for Ireland by 2020. • Preparing a legal framework for technologies in carbon capture and storage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU 2030 Framework for Climate and Energy	• A 2030 Framework for climate and energy, including EU-wide targets and policy objectives for the period between 2020 and 2030 that has been agreed by European countries.	• To meet the targets, the European Commission has proposed the following policies for 2030: • A reformed EU emissions trading scheme (ETS).	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

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	• Targets include a 40% cut in greenhouse gas emissions compared to 1990 levels, at least a 27% share of renewable energy consumption and at least 27% energy savings compared with the business-as-usual scenario.	• New indicators for the competitiveness and security of the energy system, such as price differences with major trading partners, diversification of supply, and interconnection capacity between EU countries. • First ideas for a new governance system based on national plans for competitive, secure, and sustainable energy. These plans will follow a common EU approach. They will ensure stronger investor certainty, greater transparency, enhanced policy coherence and improved coordination across the EU.	bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Clean Air for Europe Directive (2008/50/EC) **(EU Air Framework Directive)** **Fourth Daughter Directive (2004/107/EC)**	• The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive). • Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives. • Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values. • Allows the possibility for time extensions of three years (PM10) or up to five years (NO_2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission.	• Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole. • Aims to assess the ambient air quality in Member States on the basis of common methods and criteria. • Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and community measures. • Ensures that such information on ambient air quality is made available to the public. • Aims to maintain air quality where it is good and improving it in other cases. • Aims to promote increased cooperation between the Member States in reducing air pollution.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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	• The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in • ambient air.		
Noise Directive (2002/49/EC)	The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source.	The Directive requires competent authorities in Member States to: • Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels; • Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and • Inform and consult the public about noise exposure, its effects, and the measures considered to address noise. The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Floods Directive (2007/60/EC)	• Establishes a framework for the assessment and management of flood risks	• Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

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	• Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community	• Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3. • Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above. • Inform the public and allow the public to participate in planning process.	bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Framework Directive (2000/60/EC)	• Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats. • Preserve and prevent the deterioration of water status and where necessary improve and maintain “good status” of water bodies. • Promote sustainable water usage. • The Water Framework Directive repealed the following Directives: o The Drinking Water Abstraction Directive o Sampling Drinking Water Directive o Exchange of Information on Quality of Surface Freshwater Directive o Shellfish Directive	• Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive. • Achieve "good status" for all waters. • Manage water bodies based on identifying and establishing river basins districts. • Involve the public and streamline legislation. • Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas. • Establish a programme of monitoring for surface water status, groundwater status and protected areas. • Recover costs for water services.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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	o Freshwater Fish Directive o Groundwater Directive o Dangerous Substances Directive		
Groundwater Directive (2006/118/EC)	• Protect, control and conserve groundwater. • Prevent the deterioration of the status of all bodies of groundwater. • Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals.	• Meet minimum groundwater standards listed in Annex 1 of Directive. • Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Drinking Water Directive (98/83/EC)	• Improve and maintain the quality of water intended for human consumption. • Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean.	• Set values applicable to water intended for human consumption for the parameters set out in Annex I. • Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a). • Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause. • Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action. • Undertake remedial action to restore the quality of the water where necessary to protect human health. • Notify consumers when remedial action is being undertaken except where the competent authorities consider the non- compliance with the parametric value to be trivial.	
Urban Waste Water Treatment Directive (91/271/EEC)	• This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors. • The objective of the Directive is to protect the environment from the adverse effects of waste water discharges.	• Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment. • Annex II requires the designation of areas sensitive to eutrophication which receive water discharges. • Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Environmental Liability Directive (2004/35/EC) as amended by Directive 2006/21/EC, Directive 2009/31/EC and Directive 2013/30/EU	• Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage.	• Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent. • Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures. • Where environmental damage has occurred the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7. • The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive. • The competent authority shall be entitled to initiate cost recovery proceedings against the operator.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met. • The Environmental Liability Directive has been amended through a number of Directives that are not of significant relevance to the SEA for the Guidelines. Implementation of the Environmental Liability Directive is contributed towards by a Multi-Annual Work Programme (MAWP) 'Making the Environmental Liability Directive more fit for purpose' that is updated annually to changing developments, growing • knowledge and new needs.	
Marine Strategy Framework Directive (2008/56/EC), as amended	• The aim of the European Union's ambitious Marine Strategy Framework Directive is to protect more effectively the marine environment across Europe.	The Directive provides various requirements, including: • Completion of an initial assessment of Irish marine waters; • Establishment of establish environmental targets and indicators; • Establishment of a monitoring programme; • Establishment of a programme of measures; and • Implementation of the programme of measures and monitoring programme. Implementation of the Directive is contributed towards by a set of detailed criteria and methodological standards that were revised in 2017 leading to a Commission Decision on "laying down criteria and methodological standards on good environmental status of marine waters and specifications and standardised methods for monitoring and assessment,	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		and repealing Decision 2010/477/EU". Annex III "Indicative lists of characteristics, pressures and impacts" of the Directive was amended in 2017.	
European Convention on the Protection of the Archaeological Heritage (Valletta 1992)	• The aim of this (revised) Convention is to protect the archaeological heritage as a source of the European collective memory and as an instrument for historical and scientific study.	The Valletta Convention makes the conservation and enhancement of the archaeological heritage one of the goals of urban and regional planning policies. The Convention sets guidelines for the funding of excavation and research work and publication of research findings. It also deals with public access, in particular to archaeological sites, and educational actions to be undertaken to develop public awareness of the value of the archaeological heritage. It also constitutes an institutional framework for pan-European co-operation on the archaeological heritage, entailing a systematic exchange of experience and experts among the various States.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Convention of the Protection of the Architectural Heritage of Europe (Granada 1995)	• The main purpose of the Convention is to reinforce and promote policies for the conservation and enhancement of Europe's heritage. It also affirms the need for European solidarity with regard to heritage conservation and is designed to foster practical co- operation among the Parties. It establishes the principles of "European co-ordination of conservation policies" including consultations regarding the thrust of the policies to be implemented.	• The reinforcement and promotion of policies for protecting and enhancing the heritage within the territories of the parties. • The affirmation of European solidarity with regard to the protection of the heritage and the fostering of practical co- operation between states and regions.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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ICOMOS (2011) Principles for the Conservation of Industrial Heritage Sites, Structures, Areas and Landscapes ('Dublin Principles')	• It is aimed to assist in the documentation, protection, conservation and appreciation of industrial heritage as part of the heritage of human societies around the World.	• (I) Document and understand industrial heritage structures, sites, areas and landscapes and their values; • (II) Ensure effective protection and conservation of the industrial heritage structures, sites, areas and landscapes; • (III) Conserve and maintain the industrial heritage structures, sites, areas and landscapes; and • (IV) Present and communicate the heritage dimensions and values of industrial structures, sites, areas and landscapes to raise public and corporate awareness, and support training and research.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Council of Europe Framework Convention on the Value of Cultural Heritage for Society (Faro 2005)	• Cultural heritage is a group of resources inherited from the past which people identify, independently of ownership, as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. It includes all aspects of the environment resulting from the interaction between people and places through time. • A heritage community consists of people who value specific aspects of cultural heritage which they wish, within the framework of public action, to sustain and transmit to future generations.	• Recognise that rights relating to cultural heritage are inherent in the right to participate in cultural life, as defined in the Universal Declaration of Human Rights. • Recognise individual and collective responsibility towards cultural heritage. • Emphasise that the conservation of cultural heritage and its sustainable use have human development and quality of life as their goal. • Take the necessary steps to apply the provisions of this Convention concerning the role of cultural heritage in the construction of a peaceful and democratic society. • Greater synergy of competencies among all the public, institutional and private actors concerned.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Landscape Convention 2000	• The developments in agriculture, forestry, industrial and mineral production techniques, together with the practices followed in town and country planning, transport, networks, tourism and recreation, and at a more general level, changes in the world economy, have in many cases accelerated the transformation of landscapes. The Convention expresses a concern to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. It aims to respond to the public's wish to enjoy high quality landscapes.	• Promote protection, management and planning of landscapes. • Organise European co-operation on landscape issues.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Seventh Environmental Action Programme (EAP) of the European Community (2013-2020)	It identifies three key objectives: • to protect, conserve and enhance the Union's natural • capital • to turn the Union into a resource-efficient, green, and competitive low-carbon economy • to safeguard the Union's citizens from environment- related pressures and risks to health and wellbeing	Four so called "enablers" will help Europe deliver on these objectives (goals): • Better implementation of legislation. • Better information by improving the knowledge base. • More and wiser investment for environment and climate policy. • Full integration of environmental requirements and considerations into other policies. • Two additional horizontal priority objectives complete the programme: • To make the Union's cities more sustainable.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• To help the Union address international environmental and climate challenges more effectively.	
Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats)	The convention has three main aims: • to conserve wild flora and fauna and their natural habitats • to promote cooperation between states • to give particular attention to endangered and vulnerable species including endangered and vulnerable migratory species	The Parties under the convention recognise the intrinsic value of nature, which needs to be preserved and passed to future generations, they also: • Seek to ensure the conservation of nature in their countries, paying particular attention to planning and development policies and pollution control. • Look at implementing the Bern Convention in central Eastern Europe and the Caucus. • Take account of the potential impact on natural heritage by other policies. • Promote education and information of the public, ensuring the need to conserve species is understood and acted upon. • Develop an extensive number of species action plans, codes of conducts, and guidelines, at their own initiative or in co- operation with other organisations. • Created the Emerald Network, an ecological network made up of Areas of Special Conservation Interest.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Bali Road Map (2007)	The overall goals of the project are twofold: • To increase national capacity to co-ordinate ministerial views, participate in the UNFCCC process, and negotiate positions within the timeframe of the Bali Action Plan; and	The Bali Action Plan is centred on four main building Blocks: • mitigation • adaptation • technology • financing	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• To assess investment and financial flows to address climate change for up to three key sectors and/or economic activities.		achievement of the objectives of the regulatory framework for environmental protection and management.
Cancun Agreements (2010)	Set of decisions taken at the COP 16 Conference in Cancun in 2010 which addresses a series of key issues in the fight against climate change. Cancun Agreements' main objectives cover: • Mitigation • Transparency of actions • Technology • Finance • Adaptation • Forests • Capacity building	Among the most prominent agreements is the establishment of a Green Climate Fund to transfer money from the developed to developing world to tackle the impacts of climate change.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Doha Climate Gateway (2012)	Set of decisions taken at the COP 18 meeting in Doha in 2012 which pave the way for a new agreement in Paris in 2015.	• The following actions were committed to by governments at this conference: • Set out a timetable to adopt a universal climate agreement by 2015 (to come into effect in 2020); • Complete the work under Bali Action Plan and to focus on new completing new targets; • Strengthen the aim to cut greenhouse gases and help vulnerable countries to adapt; • Amend Kyoto Protocol to include a new commitment period for cutting down the greenhouse gases emissions; and	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Provide the financial and technology support and new institutions to allow clean energy investment and sustainable growth in developing countries.	
EU Common Agricultural Policy	• To improve agricultural productivity, so that consumers have a stable supply of affordable food; and • To ensure that EU farmers can make a reasonable living.	• ensuring viable food production that will contribute to feeding the world's population, which is expected to rise considerably in the future; • Climate change and sustainable management of natural resources; • Looking after the countryside across the EU and keeping the rural economy alive.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU REACH Regulation (EC 1907/2006)	• Aims to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.	The aims are achieved by applying REACH, namely: • Registration, • Evaluation, • Authorisation; and • Restriction of chemicals. REACH also aims to enhance innovation and competitiveness of the EU chemicals industry.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Stockholm Convention	• The objective of the Stockholm Convention is to protect human health and the environment from persistent organic pollutants.	• Prohibit and/or eliminate the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex A to the Convention	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

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		• Restrict the production and use, as well as the import and export, of the intentionally produced POPs that are listed in Annex B to the Convention • Reduce or eliminate releases from unintentionally produced POPs that are listed in Annex C to the Convention • Ensure that stockpiles and wastes consisting of, containing or contaminated with POPs are managed safely and in an environmentally sound manner • To target additional POPs • Other provisions of the Convention relate to the development of implementation plans, information exchange, public information, awareness and education, research, development and monitoring, technical assistance, financial resources and mechanisms, reporting, effectiveness evaluation and non-compliance	bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ramsar Convention	The Convention's mission is "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".	Under the "three pillars" of the Convention, the Contracting Parties commit to: • Work towards the wise use of all their wetlands; • Designate suitable wetlands for the list of Wetlands of International Importance (the "Ramsar List") and ensure their effective management; • Cooperate internationally on transboundary wetlands, shared wetland systems and shared species.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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OSPAR Convention	The mission of OSPAR is to conserve marine ecosystems and safeguard human health in the North-East Atlantic by preventing and eliminating pollution; by protecting the marine environment from the adverse effects of human activities; and by contributing to the sustainable use of the seas.	OSPAR's work is organised under six strategies: • Biodiversity and Ecosystem Strategy • Eutrophication Strategy • Hazardous Substances Strategy • Offshore Industry Strategy • Radioactive Substances Strategy • Strategy for the Joint Assessment and Monitoring Programme These six strategies fit together to underpin the ecosystem approach. For each strategy a programme of work is designed and implemented annually.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European 2020 Strategy for Growth	Europe 2020 sets out a vision of Europe's social market economy for the 21st century and puts forward three mutually reinforcing priorities: • Smart growth: developing an economy based on knowledge and innovation; • Sustainable growth: promoting a more resource efficient, greener and more competitive economy; • Inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.	In order to reach these priorities, the Commission proposes five quantitative targets to fulfil by 2020: 1. 75 % of the population aged 20-64 should be employed; 2. 3% of the EU's GDP should be invested in R&D; 3. the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right); 4. the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree; 5. 20 million less people should be at risk of poverty.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The European Green Deal (EGD) **2019**	The deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's quality of life, caring for nature and leaving no one behind.	• It sets out a roadmap with actions to boost the efficient use of resources by moving to a clean, circular economy, restore biodiversity and cut pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• It outlines investments required, financing tools available and explains how to ensure a just and inclusive transition. • In order to meet the goal to become climate neutral by 2050 as part of the European Green Deal, the European Union (EU) Commission proposed on 4th March 2020 to bring about the first European Climate Law and legally bind the target of net zero greenhouse gas emissions by 2050	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EU (2018) Clean Air Policy Package	Aims to substantially reduce air pollution across the EU.	The proposed strategy sets out objectives for reducing the health and environmental impacts of air pollution by 2030, and contains legislative proposals to implement stricter standards for emissions and air pollution.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Level			
Ireland 2040 - Our Plan, the National Planning Framework, and the National Development Plan (2021 - 2030)	• The National Planning Framework is the Government's high-level strategic plan for shaping the future growth and development of to the year 2040. It is a framework to guide public and private investment, to create and promote opportunities for people, and to protect and enhance the environment - from villages to cities, and everything around and in between. • The National Development Plan sets out the investment priorities that will underpin the successful implementation of the new National Planning Framework. This will guide national, regional and local planning and investment decisions in Ireland over the next two decades, to cater for an expected population increase of over 1 million people.	The National Planning Framework published alongside the National Development Plan yields ten National Strategic Outcomes as follows: 1. Compact Growth 2. Enhanced Regional Accessibility 3. Strengthened Rural Economies and Communities 4. Sustainable Mobility 5. A Strong Economy, supported by Enterprise, Innovation and Skills 6. High-Quality International Connectivity 7. Enhanced Amenity and Heritage 8. Transition to a Low-Carbon and Climate-Resilient Society 9. Sustainable Management of Water and other Environmental Resources 10. Access to Quality Childcare, Education and Health Services	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Planning, Land Use and Transport Outlook 2040 [In Preparation]	The PLUTO will take account of forecasted future economic and demographic scenarios, affordability considerations and relevant Government policies and will: • Quantify in broad terms the appropriate scale of financial investment in land transport over the long term;	In preparation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

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	• Consider how fiscal, environmental and technological developments might impact on this investment; and, • Identify strategic priorities for future investment to ensure land transport infrastructure provision facilitates • the objectives of Project Ireland 2040.		environmental protection and management.
Planning and Development Act 2000 (as amended)	• The core principal objectives of this Act are to amend the Planning Acts of 2000 – 2022 with specific regard given to supporting economic renewal and sustainable development.	• Development, with certain exceptions, is subject to development control under the Planning Acts and the local authorities grant or refuse planning permission for development, including ones within protected areas. • There are, however, a range of exemptions from the planning system. Use of land for agriculture, peat extraction and afforestation, subject to certain thresholds, is generally exempt from the requirement to obtain planning permission. • Additionally, Environmental Impact Assessment (EIA) is required for a range of classes and large scale projects. • Under planning legislation, Development Plans must include mandatory objectives for the conservation of the natural heritage and for the conservation of European sites and any other sites which may be prescribed. There are also discretionary powers to set objectives for the conservation of a variety of other elements of the natural heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities (Environmental Assessment of Certain Plans and Programmes Regulations 2004 (S.I. 435 of 2004), as amended by S.I. 200 of 2011	• The purpose of these Regulations is to transpose into Irish law Directive 2001/42/EC of 27 June 2001 (O.J. No. L 197, 21 July 2001) on the assessment of the effects of certain plans and programmes on the environment — commonly known as the Strategic Environmental Assessment (SEA) Directive.	• The Regulations cover plans and programmes in all of the sectors listed in article 3(2) of the Directive except land-use planning. • These Regulations also amend certain provisions of the Planning and Development Act 2000 to provide the statutory basis for the transposition of the Directive in respect of land-use planning. • Transposition in respect of the land-use planning sector is contained in the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436 of 2004).	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. 477 of 2011, as amended)	• These Regulations provide a new for the implementation in Ireland of Council Directive 92/43/EEC on habitats and protection of wild fauna and flora (as amended) and for the implementation of Directive 2009/147/EC of the European Parliament and of the Council on the protection of wild birds.	• They provide, among other things, for: the appointment and functions of authorized officers; identification, classification and other procedures relative to the designation of Community sites. • The Regulations have been prepared to address several judgments of the CJEU against Ireland, notably cases C- 418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Waste Management Act 1996, as amended	• To make provision in relation to the prevention, management and control of waste; to give effect to provisions of certain acts adopted by institutions of the European communities in respect of those matters; to amend the Environmental Protection Agency Act, 1992, and to repeal certain enactments and to provide for related matters.	• The Waste Management Act contains a number of key legal obligations, including requirements for waste management planning, waste collection and movement, the authorisation of waste facilities, measures to reduce the production of waste and/or promote its recovery.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (S.I 296 of 2009)	• The purpose of these Regulations is to support the achievement of favourable conservation status for freshwater pearl mussels	Actions: • Set environmental quality objectives for the habitats of the freshwater pearl mussel populations named in the First Schedule to these Regulations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a Special Area of Conservation, under the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94/1997). • Require the production of sub-basin management plans with programmes of measures to achieve these objectives. • Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measure	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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European Communities Environmental Objectives (Groundwater) Regulations 2016 (S.I. No. 366 of 2016)	• To amend the European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9 of 2010) to make further provision to implement Commission Directive 2014/80/EU of 20 June 2014 amending Annex II to Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration.	The substances and threshold values set out in Schedule 5 to S.I. No. 9 of 2010 have been reviewed and amended where necessary, based on existing monitoring information and international guidelines on appropriate threshold values. • Part A of Schedule 6 has been amended to include changes to the rules governing the determination of background levels for the purposes of establishing threshold values for groundwater pollutants and indicators of pollution. • Part B of Schedule 6 has been amended to include nitrites and phosphorus (total) / phosphates among the minimum list of pollutants and their indicators which the Environmental Protection Agency (EPA) must consider when establishing threshold values • Part C of Schedule 6 amends the information to be provided to the Minister by the EPA with regard to the pollutants and their indicators for which threshold values have been established	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2014 (S.I. No. 31 of 2014)	• These Regulations, which give effect to Irelands 3rd Nitrates Action Programme, provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources	The Regulations include measures such as: • Periods when land application of fertilisers is prohibited • Limits on the land application of fertilisers • Storage requirements for livestock manure; and • Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

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			environmental protection and management.
Bathing Water Quality Regulations 2008 (S.I. 79 of 2008)	• These Regulations provide for transposition of the EU Bathing Water Directive 2006 (Directive 2006/7/EC of 15 February 2006) which aims: o To improve health protection for bathers o To establish a more pro-active approach to management of bathing waters, and o To promote increased public involvement and dissemination of information to the public.	• The Regulations establish a new classification system for bathing water quality based on four classifications "poor", "sufficient", "good" and "excellent" and generally require that a classification of at least "sufficient" be achieved by 2015 for all bathing waters. • Local authorities must take appropriate measures with a view to improving waters which are classified as "poor" and increasing the number of bathing waters classified as "good" or "excellent". • A permanent advice against bathing must be issued in a case where a bathing water is classified as "poor" for five consecutive years. • Local authorities are required annually to identify bathing waters, establish a monitoring calendar, carry out the specified monitoring, report the results to the EPA, carry out appropriate management measures where necessary and provide information to the public. • There must be public participation in the identification of waters and the general implementation of the Regulations. • The EPA is required by the Regulations to classify bathing waters, generally on the basis of the monitoring results for the four preceding bathing seasons, and to publish an annual report in relation to bathing water quality.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		• Monitoring by local authorities is to commence not later than 2011 with a view to ensuring that a classification is assigned to bathing waters not later than 2015. • Private controllers of access lands may be required to contribute towards the costs incurred by a local authority or the EPA.	
Bathing Water Quality (Amendment) Regulations 2011 (S.I 351 of 2011)	• This Regulation defines further the minimum number of bathing water samples required to carry out a bathing water quality assessment.	• Further defines the minimum number of bathing water samples required to carry out a bathing water quality assessment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Climate Action and Low Carbon Development (Amendment) Act 2021	An Act to provide for the approval of plans by the Government in relation to climate change for the purpose of pursuing the transition to a low carbon, climate resilient and environmentally sustainable economy.	When considering a plan or framework, for approval, the Government shall endeavour to achieve the national transition objective within the period to which the objective relates and shall, in endeavouring to achieve that objective, ensure that such objective is achieved by the implementation of measures that are cost effective and shall, for that purpose, have regard to: • The ultimate objective specified in Article 2 of the United Nations Framework Convention on Climate Change done at New York on 9 May 1992 and any mitigation commitment	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• entered into by the European Union in response or otherwise in relation to that objective, • The policy of the Government on climate change, • Climate justice, • Any existing obligation of the State under the law of the European Union or any • international agreement referred to in section 2; and • The most recent national greenhouse gas emissions inventory and projection of future greenhouse gas • emissions, prepared by the Agency.	
Climate Action Plan 2023	The Climate Action Plan 2023 provides a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021.	The Plan lists the actions needed to deliver on our climate targets and sets indicative ranges of emissions reductions for each sector of the economy. It will be updated annually, to ensure alignment with Ireland's legally binding economy-wide carbon budgets and sectoral ceilings	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Ireland's Second National Implementation Plan for the Sustainable Development Goals (2022 - 2024)	• National Implementation Plan 2022 - 2024 is in direct response to the 2030 Agenda for Sustainable Development and provides a whole-of-government approach to implement the 17 Sustainable Development Goals (SDGs). • The first version of the Plan (2018 – 2020) provided a 'SDG Matrix' which identifies the responsible Government Departments for each of the • 169 targets. It also included a 'SDG Policy Map' indicating the relevant national policies for each of the targets.	The Plan identifies five strategic objectives to guide implementation: • To embed the SDG framework into the work of Government Departments to achieve greater Policy Coherence for Sustainable Development; • To integrate the SDGs into Local Authority work to better support the localisation of the SDGs; • Greater partnerships for the Goals; • To further incorporate the principle of Leave No One Behind into Ireland's Agenda 2030 implementation and reporting mechanisms; and • Strong reporting mechanisms	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Infrastructure and Capital Investment Plan (2016-2021)	• €27 billion multi-annual Exchequer Capital Investment Plan, which is supported by a programme of capital investment in the wider State sector, and which over the period 2016 to 2021 will help to lay the foundations for continued growth in Ireland.	• This Capital Plan reflects the Government's commitment to supporting strong and sustainable economic growth and raising welfare and living standards for all. • It includes allocations for new projects across a number of key areas and funding to ensure that the present stock of national infrastructure is refreshed and maintained.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Ireland's National Renewable Energy Action Plan 2010 (Irish Government submission to the European Commission)	• The National Renewable Energy Action Plan (NREAP) sets out the Government's strategic approach and concrete measures to deliver on Ireland's 16% target under Directive 2009/28/EC.	• The NREAP sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			achievement of the objectives of the regulatory framework for environmental protection and management.
Strategy for Renewable Energy (2012-2020)	• The Government's overarching strategic objective is to make renewable energy an increasingly significant component of Ireland's energy supply by 2020, so that at a minimum it will achieve its legally binding 2020 target in the most cost efficient manner for consumers. Of critical importance is the role which the renewable energy s activity as part of the Government's action plan for jobs sector plays in job creation and economic	This document sets out five strategic goals, reflecting the key dimensions of the renewable energy challenge to 2020: • Increasing on and offshore wind, • Building a sustainable bioenergy sector, • Fostering R&D in renewables such as wave & tidal, • Growing sustainable transport; and • Building out robust and efficient networks.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Climate Mitigation Plan 2017	• The Plan represents an initial step to set Ireland on a pathway to achieve the deep decarbonisation required in Ireland by mid-century in line with the Government's policy objectives.	The National Mitigation Plan focuses on the following issues: • Climate Action Policy Framework • Decarbonising Electricity Generation • Decarbonising the Built Environment • Decarbonising Transport • An Approach to Carbon Neutrality for Agriculture, Forest and Land Use Sectors	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Policy Position on Climate Action and Low Carbon Development (2014)	• The National Policy Position provides a high-level policy direction for the adoption and implementation by Government of plans to enable the State to move to a low carbon economy by 2050. • Statutory authority for the plans is set out in the Climate Action and Low Carbon Development Act 2015.	National climate policy in Ireland: • Recognises the threat of climate change for humanity; • Anticipates and supports mobilisation of a comprehensive international response to climate change, and global transition to a low-carbon future; • Recognises the challenges and opportunities of the broad transition agenda for society; and • Aims, as a fundamental national objective, to achieve transition to a competitive, low carbon, climate-resilient and • environmentally sustainable economy by 2050.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Clean Air Strategy for Ireland (2023)	• The Clean Air Strategy provides the strategic policy framework necessary to identify and promote integrated measures across government policy that are required to reduce air pollution and promote cleaner air while delivering on wider national objectives.	• Through this document Ireland can develop the necessary policies and measures to comply with new and emerging EU legislation. • The Strategy should also help tackle climate change. • The Strategy considers a wider range of national policies that are relevant to clean air policy such as transport, energy, home heating and agriculture. • In any discussion relating to clean air policy, the issue of people's health is paramount, this is a strong theme of the Strategy.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
EirGrid 's Grid25 Strategy and associated Grid25 Implementation	• EirGrid 's mission is to develop, maintain and operate a safe, secure, reliable, economical and efficient transmission system for Ireland.	• Grid25, EirGrid 's roadmap to uprate the electricity transmission grid by 2025, continues to be implemented so as to increase the capacity of the grid, to satisfy future demand, and to help Ireland meet its target of 40 per cent of electricity from renewable energy by 2020.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and

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Programme 2017 - 2022	• *"Our vision is of a grid developed to match future needs, so it can safely and reliably carry power all over the country to the major towns and cities and onwards to every home, farm and business where the electricity is consumed and so it can meet the needs of consumers and generators in a sustainable way."*		bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
All Island Grid Study 2008	• The All Island Grid Study is the first comprehensive assessment of the ability of the electrical power system and, as part of that, the transmission network ("the grid") on the island of Ireland to absorb large amounts of electricity produced from renewable energy sources. • The objective of this five-part study is to assess the technical feasibility and the relative costs and benefits associated with various scenarios for increased shares of electricity sourced from renewable energy in the all island power system.	Key conclusions of the study: • The presented results indicate that the differences in cost between the highest cost and the lowest cost portfolios are low (7%), given the assumptions made and costs included in the Study. • All but the high coal-based portfolio lead to significant reductions of CO2 emissions compared to portfolio 1 • All but the high coal-based portfolio lead to reductions on the dependency of the all island system on fuel and electricity imports. • The limitations of the study may overstate the technical feasibility of the portfolios analysed and could impact the costs and benefits resulting. Further work is required to understand the extent of such impact. • Timely development of the transmission networks, requiring means to address the planning challenge, is a precondition for implementation of the portfolios considered.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Market mechanisms must facilitate the installation of complementary, i.e. flexible, dispatchable plant, so as to maintain adequate levels of system security.	
Strategy for the Future Development of National and Regional Greenways (2018)	• The objective of this Strategy is to assist in the strategic development of nationally and regionally significant Greenways in appropriate locations constructed to an appropriate standard in order to deliver a quality experience for all Greenways users. • It also aims to increase the number and geographical spread of Greenways of scale and quality around the country over the next 10 years with a consequent significant increase in the number of people using Greenways as a visitor experience and as a recreational amenity.	• A Strategic Greenway network of national and regional routes, with a number of high capacity flagship routes that can be extended and/or link with local Greenways and other cycling and walking infrastructure; • Greenways of scale and appropriate standard that have significant potential to deliver an increase in activity tourism • to Ireland and are regularly used by overseas visitors, • domestic visitors and locals thereby contributing to a healthier society through increased physical activity; • Greenways that provide a substantially segregated offroad experience linking places of interest, recreation and leisure in areas with beautiful scenery of different types with plenty to see and do; and • Greenways that provide opportunities for the development of local businesses and economies, and • Greenways that are developed with all relevant stakeholders in line with an agreed code of practice.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Water Resources Plan (2021)	• The NWRP is a plan on how to provide a safe, secure and reliable water supply to customers for the next 25 years, without causing adverse impact on the environment. • The objective of the NWRP is to set out how we intend to maintain the supply and demand for drinking water over the short, medium and long term whilst minimising the impact on the environment.	The key objectives of the plan are to: • Identify areas where there are current and future potential water supply shortfalls, taking into account normal and extreme weather conditions • Assess the current and future water demand from homes, businesses, farms, and industry • Consider the impacts of climate change on Ireland's water resources • Develop a drought plan advising measures to be taken before and during drought events • Develop a plan detailing how we deal with the material that is produced as a result of treating drinking water • Identify, develop and assess options to help meet potential shortfalls in water supplies • Assess the water resources available at a national level including lakes, rivers and groundwater	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Strategic Plan for Aquaculture Development 2030 [Awaiting publication]	*"This multi-annual National Strategic Plan Sustainable Aquaculture Development (2022 – 2030) (NSPSA) overlaps with the EU's new 'Strategic guidelines for a more sustainable and competitive EU aquaculture for the period 2021 to 2030', as well as the programming period (2021 to 2027) of the European Maritime Fisheries and Aquaculture Fund (EMFAF). As such, this plan provides the strategic vision and framework for funding under EMFAF, as well as other EU and national initiatives."*	• Develop 'Designated Marine Area Plans' (DMAPs) for aquaculture to ensure that the sector is championed in Ireland's Marine Spatial Plan to facilitate investment in different forms of sustainable aquaculture. • More vigilant and responsive monitoring if aquatic diseases and food safety risks.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Develop a comprehensive human capacity plan for Irish aquaculture to promote the sector as an attractive career option, develop leadership, management and business capacity in the sector and provide the necessary skills required over the strategy time period. • Provide coordinated messaging on the sustainable, low carbon nature of Irish aquaculture production, supported by independent certification and open dialogue.	
Construction 2020, A Strategy for a Renewed Construction Sector	• Construction 2020 sets out a package of measures agreed by the Government and is aimed at stimulating activity in the building industry. • The Strategy aims both to increase the capacity of the sector to create and maintain jobs, and to deliver a sustainable sector, operating at an appropriate level. It seeks to learn the lessons of the past and to ensure that the right structures and mechanisms are in place so that they are not repeated.	This Strategy therefore addresses issues including: • A strategic approach to the provision of housing, based on real and measured needs, with mechanisms in place to detect and act when things are going wrong; • Continuing improvement of the planning process, striking the right balance between current and future requirements; • The availability of financing for viable and worthwhile projects; • Access to mortgage finance on reasonable and sustainable terms; • Ensuring we have the tools we need to monitor and regulate the sector in a way that underpins public confidence and worker safety; • Ensuring a fit for purpose sector supported by a highly skilled workforce achieving high quality and standards; and	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Ensuring opportunities are provided to unemployed former construction workers to contribute to the recovery of the sector.	
Sustainable Development: A Strategy for Ireland (1997)	• The overall aim of this Strategy is to ensure that economy and society in Ireland can develop to their full potential within a well-protected environment, without compromising the quality of that environment, and with responsibility towards present and future generations and the wider international community.	• The Strategy addresses all areas of Government policy, and of economic and societal activity, which impact on the environment. It seeks to re-orientate policies as necessary to ensure that the strong growth Ireland enjoys and seeks to maintain will be environmentally sustainable.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Landscape Strategy for Ireland 2015-2025 and National Landscape Character Assessment (pending preparation)	• The National Landscape Strategy will be used to ensure compliance with the European Landscape Convention and to establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high level policy framework to achieve balance between the protection, management and planning of the landscape by way of supporting actions.	The objectives of the National Landscape Strategy are to: • Implement the European Landscape Convention by integrating landscape into the approach to sustainable development; • Establish and embed a public process of gathering, sharing and interpreting scientific, technical and cultural information in order to carry out evidence-based identification and description of the character, resources and processes of the landscape; • Provide a policy framework, which will put in place measures at national, sectoral - including agriculture, tourism, energy, transport and marine - and local level, together with civil society, to protect, manage and properly plan through high quality design for the sustainable stewardship of the landscape;	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• Landscape Strategy Vision: "Our landscape reflects and embodies our cultural values and our shared natural heritage and contributes to the well-being of our society, environment and economy. We have an obligation to ourselves and to future generations to promote its sustainable protection, management and planning."	• Ensure that we take advantage of opportunities to implement policies relating to landscape use that are complementary and mutually reinforcing and that conflicting policy objectives are avoided in as far as possible.	
National Hazardous Waste Management Plan (EPA) 2021 - 2027	• This Plan sets out the priorities to be pursued over the next six years and beyond to improve the management of hazardous waste, taking into account the progress made since the previous plan and the waste policy and legislative changes that have occurred since the previous plan was published. Section 26 of the Waste Management Act 1996 as amended, sets out the overarching objectives for the National Hazardous Waste Management Plan. In this context, the following objectives are included as priorities for the revised Plan period: • To prevent and reduce the generation of hazardous waste by industry and society generally; • To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste;	The revised Plan makes 20 recommendations under the following topics: • Policy and Regulation • Prevention • Collection and Treatment • Implementation	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	• To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export; • To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.		
National Ports Policy 2013	• The core objective of National Ports Policy is to facilitate a competitive and effective market for maritime transport services.	National Ports Policy introduces clear categorisation of the ports sector into Ports of National Significance (Tier 1), Ports of National Significance (Tier 2) and Ports of Regional Significance.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Aviation Policy 2015	Specifically, the principal goals of this National Aviation Policy are: • To enhance Ireland's connectivity by ensuring safe, secure and competitive access responsive to the needs of business, tourism and consumers; • To foster the growth of aviation enterprise in Ireland to support job creation and position Ireland as a recognised global leader in aviation; and • To maximise the contribution of the aviation sector to Ireland's economic growth and development.	The National Aviation Policy commits to: • Maintaining safety as the number one priority in Irish aviation and ensuring that safety regulation is robust, effective and efficient; • Creating conditions to encourage the development of new routes and services, particularly to new and emerging markets; • Ensuring a high level of competition among airlines operating in the Irish market; • Optimising the operation of the Irish airport network to ensure maximum connectivity to the rest of the world;	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Ensuring that the regulatory framework for aviation reflects best international practice and that economic regulation facilitates continued investment in aviation infrastructure at Irish airports to support traffic growth; • Supporting the aircraft leasing and aviation finance sectors to maintain Ireland's leading global position in these spheres; and • Maintaining a safe and innovative general aviation sector to support Ireland's broader aviation industry	
Ministerial Guidelines such as Sustainable Rural Housing Guidelines and Flood Risk Management Guidelines	• The Department produces a range of guidelines designed to help planning authorities, An Bord Pleanála, developers and the general public and cover a wide range of issues amongst others, architectural heritage, child care facilities, landscape, quarries and residential density.	• The Minister issues statutory guidelines under Section 28 of the Act which planning authorities and An Bord Pleanála are obliged to have regard to in the performance of their planning functions.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
HSE Healthy Ireland Framework for Improved Health and Wellbeing 2013-2025	• The vision is: *"A Healthy Ireland, where everyone can enjoy physical and mental health and wellbeing to their full potential, where wellbeing is valued and supported at every level of society and is everyone's responsibility."*	These four goals are interlinked, interdependent and mutually supportive: • Goal 1: Increase the proportion of people who are healthy at all stages of life • Goal 2: Reduce health inequalities • Goal 3: Protect the public from threats to health and wellbeing	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Goal 4: Create an environment where every individual and sector of society can play their part in achieving a healthy Ireland	environmental protection and management.
National Marine Planning Framework 2021	The NMPF is a key consideration for decision makers on all marine authorisations. The NMPF creates the overarching framework for decision making that is consistent, evidence based, and secures a sustainable future for the maritime area.	The National Marine Planning Framework is a succinct strategic document that will deal with, inter alia, the following environmental, social and economic issues: • Key marine activities such as fisheries, tourism, transport, offshore renewable energy generation, oil and gas exploration and production, aquaculture, and how they interact; • Climate change and related impacts; • Communities and health; • Cultural heritage; • Marine environment and biodiversity; • Transboundary interactions with other jurisdictions. •	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism Action Plan 2019 - 2021	Includes a total of 27 actions to be addressed in the period between now and 2018 aimed at securing continued growth in overseas tourism revenue and employment.	23 actions address a range of key issues, including the marketing of Ireland as a visitor destination overseas, visitor access to and within Ireland, the effective presentation of Irish culture, sport, and events to visitors, the role of Local Authorities in supporting tourism, visitor accommodation capacity, and skills development in the tourism sector. The actions are directed at specific tourism stakeholders in the public and private sectors, all of whom are expected to proactively work towards completion of each action within the specified timeframe.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Tourism Policy Statement: People, Place and Policy – Growing Tourism to 2025	The main goal of this policy statement is to have a vibrant, attractive tourism sector that makes a significant contribution to employment across the country; is economically, socially and environmentally sustainable; helps promote a positive image of Ireland overseas, and is a sector in which people want to work.	The Tourism Policy Statement sets three headline targets to be achieved by 2025: • Overseas tourism revenue of €5 billion per year • net of inflation excluding carrier receipts; • 250,000 people employed in tourism; and • 10 million overseas visitors to Ireland per year.	Where new land use developments or activities occur as a result of this legislation, plan, programme, etc., individually or in combination with others, potential in combination effects may arise. Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Tourism 2020: Tourism Strategy for Northern Ireland to 2020	• Northern Irelands Tourism Strategy until 2020 • Vision is to "Create the new Northern Ireland experience and get it on everyone's destination wish list" • Details an Action Plan to achieving targets for People, Products and Places, Promotion and Partnership	• Sets targets for: o Increasing visitor numbers o Increasing tourism earnings o Accelerating visitor spend o Targeting specific markets and segments o Supporting indigenous high quality businesses o Being visitor inspired • Plan provides for development of at least 22 key sites on Causeway Coastal Route	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Our Sustainable Future: A framework for Sustainable Development for Ireland 2012	A medium to long term framework for advancing sustainable development and the green economy in Ireland. It identifies spatial planning as a key challenge for sustainable development and sets a series of measures to address these challenges.	• Sets out the challenges facing us and how we might address them in making sure that quality of life and general wellbeing can be improved and sustained in the decades to come.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	• Outlines a policy for how a sustainable travel and transport system can be achieved. • Sets out five key goals: o To reduce overall travel demand. o To maximise the efficiency of the transport network. o To reduce reliance on fossil fuels. o To reduce transport emissions. o To improve accessibility to transport.	• Others lower level aims include: o reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment o ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking o improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies o strengthening institutional arrangements to deliver the targets	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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National Investment Framework for Transport in Ireland (NIFTI) 2021	• NIFTI is the Department of Transport's framework for prioritising future investment in the land transport network to support the delivery of the National Strategic Outcomes. • The NIFTI will guide transport investment in the years ahead to enable the National Planning Framework, support the Climate Action Plan, and promote social, environmental and economic outcomes throughout Ireland.	The four investment priorities stated in NIFTI are: • Mobility of people and goods in urban areas. • Protection and renewal. • Enhanced regional and rural connectivity. • Decarbonisation.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 **(2007)**	• White paper setting out a framework for delivering a sustainable energy future in Ireland. • Outlines strategic Goals for: o Security of Supply o Sustainability of Energy o Competitiveness of Energy Supply	The underpinning Strategic Goals are: • Ensuring that electricity supply consistently meets demand • Ensuring the physical security and reliability of gas supplies to Ireland • Enhancing the diversity of fuels used for power generation • Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks • Creating a stable attractive environment for hydrocarbon exploration and production • Being prepared for energy supply disruptions	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Adaptation Framework (NAF) 2018 and associated regional, local and sectoral adaptation plans (including transport)	• NAF specifies the national strategy for the application of adaptation measures in different sectors and by local authorities in their administrative areas in order to reduce the vulnerability of the State to the negative effects of climate change and to	• Adaptation under this Framework should seek to minimise costs and maximise the opportunities arising from climate change. • Adaptation actions range from building adaptive capacity (e.g. increasing awareness, sharing information and targeted training) through to policy and finance based actions.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. –

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	avail of any positive effects that may occur	• Adaptation actions must be risk based, informed by existing vulnerabilities of our society and systems and an understanding of projected climate change. • Adaptation actions taken to increase climate resilience must also consider impacts on other sectors and levels of governance	the achievement of the objectives of the regulatory framework for environmental protection and management.
Governments White Paper 'Ireland's Transition to a Low Carbon Energy Future' (2015 – 2030)	The White Paper sets out a vision and a framework to guide Irish energy policy between now and 2030. A complete energy policy update informed by the vision to transform Ireland into a low carbon society and economy by 2050.	2030 will represent a significant milestone, meaning: • Reduced GHG emissions from the energy sector by between 80% and 95% • Ensuring that secure supplies of competitive and affordable energy remain available to citizens and businesses.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Renewable Energy Action Plan (2010)	• Sets out the Member State's national targets for the share of energy from renewable sources to be consumed in transport, electricity and heating and cooling in 2020, and demonstrates how the Member State will meet its overall national target established under the Directive.	Including Ireland's 16% target of gross final consumption to come from renewables by 2020.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Energy Efficiency Action Plan	• This is the second National Energy Efficiency Action Plan for Ireland.	• The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and

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for Ireland (2009 – 2020)			align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Wildlife Act of 1976 **Wildlife (Amendment) Act, 2000**	• The act provides protection and conservation of wild flora and fauna.	• Provides protection for certain species, their habitats and important ecosystems • Give statutory protection to NHAs • Enhances wildlife species and their habitats • Includes more species for protection	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Actions for Biodiversity (2017-2021) Ireland's National Biodiversity Plan	• Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally.	• To mainstream biodiversity in the decision-making process across all sectors. • To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity. • To increase awareness and appreciation of biodiversity and ecosystems services. • To conserve and restore biodiversity and ecosystem services in the wider countryside. • To conserve and restore biodiversity and ecosystem services in the marine environment.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• To expand and improve on the management of protected areas and legally protected species. • To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services.	
National Broadband Plan (2012)	• Sets out the strategy to deliver high speed broadband throughout Ireland.	The Plan sets out: • A clear statement of Government policy on the delivery of High Speed Broadband. • Specific targets for the delivery and rollout of high speed broadband and the speeds to be delivered. • The strategy and interventions that will underpin the successful implementation of these targets. • A series of specific complementary measures to promote implementation of Government policy in this area.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)	• Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process. • Ensures flood risk is a key consideration in preparing land use plansand in the assessment of planning applications. • Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels. • Planning authorities and An Bord Pleanála are required to have regard to the Guidelines in carrying out their functions under the Planning Acts.	• Avoid inappropriate development in areas at risk of flooding. • Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off. • Ensure effective management of residual risks for development permitted in floodplains. • Avoid unnecessary restriction of national, regional or local economic and social growth. • Improve the understanding of flood risk among relevant stakeholders. • Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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		management. The 2009 Flood Risk Management Guidelines were amended by Circular PL 2/2014 (Department of the Environment, Community and Local Government) that provides advice on the use of OPW flood mapping in assessing planning applications and clarifies some advice from the 2009 Guidelines.	
European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003) **European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)** **European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)**	• Transpose the Water Framework Directive into legislation. • Outlines the general duty of public authorities in relation to water. • Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions.	• Implements River basin districts and characterisation of RBDs and River Basin Management Plans. • Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs. • Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies. • Allows the competent authority to recover the cost of damage/destruction of status of water body. • Outlines environmental objectives and programme of measures and environmental quality standards for priority substances. • Outlines criteria for assessment of groundwater. • Outlines environmental objectives to be achieved for surface water bodies. • Outlines surface water quality standards. • Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)	• Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation.	• Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality. • Sets groundwater quality standards. • Outlines threshold values for the classification and protection of groundwater.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Government (Water Pollution) Acts 1977 to 1990	• The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division.	The Water Pollution Acts enable local authorities to: • Prosecute for water pollution offences. • Attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters. • Issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution. • issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; • Seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects. • Prepare water quality management plans for any waters in or adjoining their functional areas. •	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

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Water Services Act 2007 **Water Services (Amendment) Act 2012** **Water Services Act (No. 2) 2013**	• Provides the water services infrastructure. • Outlines the responsibilities involved in delivering and managing water services. • Identifies the authority in charge of provision of water and wastewater supply. • Irish Water was given the responsibility of the provision of water and wastewater services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland.	Key strategic objectives include: • Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. • Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. • Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards • Ensuring the provision of the remaining infrastructure needed to provide secondary wastewater treatment, for compliance with the requirements of the EU Urban Wastewater Treatment Directive. • Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. • Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. • Ensuring a fair funding model to deliver water services. • Overseeing the establishment of an economic regulation function under the CER.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Irish Water's (now known as Uisce Eireann) Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan (2020 - 2024)	• This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term.	Six strategic objectives as follows: • Meet Customer Expectations. • Ensure a Safe and Reliable Water Supply. • Provide Effective Management of Wastewater. • Protect and Enhance the Environment. • Support Social and Economic Growth. • Invest in the Future.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Raised Bog SAC Management Plan and Review of Raised Bog Natural Heritage Areas 2017 - 2022	• Aims to meet nature conservation obligations while having regard to national and local economic, social and cultural needs	• Ensure that the implications of management choices for water levels, quantity and quality are fully explored, understood and factored into policy making and land use planning. • Review the current raised bog NHA network in terms of its contribution to the national conservation objective for raised bog habitats and determine the most suitable sites to replace the losses of active raised bog habitat and high bog areas within the SAC network and to enhance the national network of NHAs.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Harvest 2020	• Food Harvest 2020 is a roadmap for the Irish food industry, as it seeks to innovate and expand in response to increased global demand for quality foods. It sets out a vision for the potential growth in agricultural output after the removal of milk quotas.	• Seeks for the improvement of all agricultural sectors at all levels in terms of sustainability, environmental consideration and marketing development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			framework for environmental protection and management.
Agri-vision 2015 Action Plan	Outlines the vision for agricultural industry to improve competitiveness and response to market demand while respecting and enhancing the environment	not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Rural Environmental Protection Scheme (REPS) **Agri-Environmental Options Scheme (AEOS)** **Green, Low-Carbon, Agri- environment Scheme (GLAS)**	• Agri-environmental funding schemes aimed at rural development for the environmental enhancement and protection. • GLAS is the new replacement for REPS and AEOS which are both expiring.	• Establish best practice farming methods and production methods in order to protect landscapes and maximise conservation. • Protect biodiversity, endangered species of flora and fauna and wildlife habitats. • Ensure food is produced with the highest regard to the environment. • Implement nutrient management plans and grassland management plans. • Protect and maintain water bodies, wetlands and cultural heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Rural Development Programme	• The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas	At a more detailed level, the programme also: • Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; • Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and • Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Forestry Programme (2014-2020)	• Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020.	Measures include the following: • Afforestation and Creation of Woodland • NeighbourWood Scheme • Forest Roads • Reconstitution Scheme • Woodland Improvement Scheme • Native Woodland Conservation Scheme • Knowledge Transfer and Information Actions • Producer Groups • Innovative Forest Technology • Forest Genetic Reproductive Material • Forest Management Plans	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
River Basin Management Plan	• River Basin Management Plans set out the measures planned to maintain and improve the status of waters.	• Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive. • Identify and manages water bodies in the RBD.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		• Establish a programme of measures for monitoring and improving water quality in the RBD. • Involve the public through consultations.	combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Peatlands Strategy (2015-2025)	This Strategy aims to provide a long-term framework within which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution to the well-being of this and future generations.	Objectives of the Strategy: • To give direction to Ireland's approach to peatland management. • To apply to all peatlands, including peat soils. • To ensure that the relevant State authorities and state owned companies that influence such decisions contribute to meeting cross-cutting objectives and obligations in their policies and actions. • To ensure that Ireland's peatlands are sustainably managed so that their benefits can be enjoyed responsible. • To inform appropriate regulatory systems to facilitate good decision making in support of responsible use. • To inform the provision of appropriate incentives, financial supports and disincentives where required. • To provide a framework for determining and ensuring the most appropriate future use of cutover and cutaway bogs.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		To ensure that specific actions necessary for the achievement of its objectives are clearly identified and delivered by those involved in or responsible for peatlands management or for decisions affecting their management.	
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	• The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive.	CFRAM Studies have been undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. Flood Risk and Hazard mapping, including Flood Extent Mapping, was finalised in 2017. The final outputs from the studies are the CFRAM Plans, finalised in 2018. The Plans define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft National Bioenergy Plan 2014 - 2020	The Draft Bioenergy Plan sets out a vision as follows: • Bioenergy resources contributing to economic development and sustainable growth, generating jobs for citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner.	Three high level goals, of equal importance, based on the concept of sustainable development are identified: • To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs. • To increase awareness of the value, opportunities and societal benefits of developing bioenergy. • To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Draft Renewable Electricity Policy and Development Framework (DCCAE) 2016	Goal: To optimise the opportunities in Ireland for renewable electricity development on land at significant scale, to serve both the All Island Single Electricity Market and any future regional market within the European Union, in accordance with European and Irish law, including Directive 2009/28/EC: On the promotion of the use of energy from renewable resources.	Objective: To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
National Alternative Fuels Infrastructure for the Transport Sector (DTTAS) 2017-2030	This Framework sets targets to achieve an appropriate level of alternative fuels infrastructure for transport, which is relative to national policy and Irish market needs. Non-infrastructure-based incentives to support the use of the infrastructure and the uptake of alternative fuels are also included within the scope of the Framework.	Targets for alternative fuel infrastructure include the following: • AFV forecasts • Electricity targets • Natural gas (CNG, LNG) targets • Hydrogen targets • Biofuels targets • LPG targets • Synthetic and paraffinic fuels targets	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Food Wise 2025 (DAFM)	Food Wise 2025 sets out a ten year plan for the agri-food sector. It underlines the sector's unique and special position within the Irish economy, and it illustrates the potential which exists for this sector to grow even further.	Food Wise 2025 identifies ambitious and challenging growth projections for the industry over the next ten years including: • 85% increase in exports to €19 billion. • 70% increase in value added to €13 billion. • 60% increase in primary production to €10 billion. • The creation of 23,000 additional jobs all along the supply chain from producer level to high end value added product development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
National Cycle Network Scoping Study 2010	• Outlines objectives and actions aimed at developing a strong cycle network in Ireland • Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed	• Sets a target where 10% of all journeys will be made by bike by 2020 • Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Strategic Planning Policy Statement (SPPS) NI	The SPPS consolidates some twenty separate policy publications into one document and sets out strategic subject planning policy for a wide range of planning matters. It also provides the core planning principles to underpin delivery of the two-tier planning system with the aim of furthering sustainable development.	• The overall objective of the planning system is to further sustainable development and improve well-being for the people of the North.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
National Policy Framework **For Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030**	• This National Policy Framework on Alternative Fuels Infrastructure for Transport represents the first step in communicating our longer term national vision for decarbonising transport by 2050, the cornerstone of which is our ambition that by 2030 all new cars and vans sold in Ireland will be zero-emissions capable. • By 2030 it is envisaged that the movement in Ireland to electrically-fuelled cars and commuter rail will be well underway, with natural gas and biofuels developing as major alternatives in the freight and bus sectors.	This policy set out to achieve five key goals in transport: • Reduce overall travel demand • Maximise the efficiency of the transport network • Reduce reliance on fossil fuels • Reduce transport emissions • Improve accessibility to transport These goals remain the cornerstone of transport policy and are fully aligned to the objectives of this National Policy Framework.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional/ County/Local Level			
Regional Economic and Spatial Strategies	The Regional Spatial and Economic Strategies provide a long-term regional level strategic planning and economic framework in support of the implementation of the National Planning Framework.	The Eastern and Midland Regional Economic and Spatial Strategy includes provisions for its 12 constituent local authorities: Fingal County Council; Dublin City Council; South Dublin County Council; Dún Laoghaire-Rathdown County Council; Louth County Council; Kildare County Council; Meath County Council; Wicklow County Council; Longford County Council; Laois County Council; Offaly County Council; and Westmeath County Council.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
		The Southern Regional Economic and Spatial Strategy includes provisions for its nine constituent local authorities: Waterford City and County Council, Cork City Council, Cork County Council, Tipperary County Council, Wexford County Council, Kerry County Council, Clare County Council, Limerick City and County Council, Kilkenny County Council and Carlow County Council. The Northern and Western Regional Spatial and Economic Strategy includes provisions for its eight constituent local authorities: Donegal County Council, Leitrim County Council, Sligo County Council, Cavan County Council, Monaghan County Council, Mayo County Council, Roscommon County Council, and Galway County Council.	
Regional Development Strategy 2035 (Northern Ireland)	• Spatial strategy for the future development of Northern Ireland. • Strategic planning framework to facilitate and guide public and private sectors.	• Aims to provide long-term policy direction with a strategic spatial perspective.	Implementation of the Guidelines need to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Greater Dublin Area (GDA) Transport Strategy (2016-2035)	• It sets out how transport will be developed across the region, covering Dublin, Meath, Wicklow and Kildare, over the period of the strategy and has been approved by the Minister for Transport, Tourism and Sport in accordance	They set out a number of core principles deriving from the strategic vision, which are: • Dublin as the capital city of Ireland and a major European centre shall grow and progress, competing with other cities in the EU, and serving a wide range of international, national, regional and local needs.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. –

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	with the relevant legislation. • The Vision Statement: *"The GDA by 2022 is an economically vibrant, active and sustainable international Gateway Region, with strong connectivity across the GDA Region, nationally and worldwide; a region which fosters communities living in attractive, accessible places well supported by community infrastructure and enjoying high quality leisure facilities; and promotes and protects across the GDA green corridors, active agricultural lands and protected natural areas."* Full SEA and Stage 2 AA have been undertaken on this Strategy	• The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the Country. • The GDA, through its ports and airport connections will continue to be the most important entry/exit point for the country as a whole, and as a Gateway between the European Union and the rest of the World. Access to and through the GDA will continue to be a matter of national importance. • Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form. • Development within the existing urban footprint of the Metropolitan Area will be consolidated to achieve a more compact urban form • Development in the Hinterland Area will be focused on the high quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses.	the achievement of the objectives of the regulatory framework for environmental protection and management.
Transport Strategy for the Cork Metropolitan Area 2040	• The Strategy addresses all transport modes and its objective will be to provide a long-term strategic planning framework for the integrated development of transport infrastructure and services in the Cork Metropolitan Area, over the next two decades	• It will be used to inform transport investment levels and investment prioritisation over both the longer and shorter terms and will be able to inform sustainable integrated land use and transport policy formulation at the strategic (Metropolitan Area) level and at the local level.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			the regulatory framework for environmental protection and management.
Greater Dublin Area Cycle Network Plan	• Sets out a ten year cycling strategy for Counties Dublin, Kildare, Meath and Wicklow • Plan to increase regions cycle network dramatically • The Plan refers to the EuroVelo International Cycle Route Network of the European Cyclists Federation is a network of 15 long distance cycle routes connecting and uniting the whole European continent. Two of these routes are in Ireland including EV2 from Galway through Dublin to London, Berlin, Warsaw and Moscow.	Aims to identify and determine: • The Urban Cycle Network at the Primary, Secondary and Feeder level • The Inter-Urban Cycle Network linking the relevant sections of the Urban Network including the elements of the National Cycle Network within the Greater Dublin Area including linkages to key transport locations outside of urban areas such as airports and ports • The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Dublin to Galway Greenway Plan	• Develop a segregated cycling and walking trail to international standards, extending from Dublin City to Galway which is of a scale that will allow Ireland to harness the potential of an identified growing tourism market for cycling. • This route forms part of an interconnected National Cycle Network of high quality, traffic free, inter urban routes, which will establish Ireland as a quality international tourism destination for a broad range of associated recreational activities and pursuits.	• To provide a segregated, substantially off road cycle route from Dublin City to Clifden via Galway City, maximising the use of – where feasible – existing and approved routes and disused railway line corridors and to also use existing plans and/or permitted projects where these have been subject to a consent process that has previously included the carrying out or screening for SEA, EIA and AA.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Regional Development Strategy 2035 (Northern Ireland)	• Spatial strategy for the future development of Northern Ireland. • Strategic planning framework to facilitate and guide public and private sectors.	• Aims to provide long-term policy direction with a strategic spatial perspective.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Water Quality Management Plans	• Ensure that the quality of waters covered by the plan is maintained. • Maintain and improve the quantity and quality of water included in the Plan scope.	• Monitoring of water bodies against quality standards. • Outlines management programmes for water catchments. • Purpose is to maintain and improve the quantity and quality of groundwater.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Port Masterplans (such as Dublin Port Masterplan 2012-2040 and 2017 Review)	• The Masterplan sets out a vision for the operations of the port and land utilisation. • The Masterplan is a non-statutory plan which has nonetheless been framed within the context of EU, national, regional and local development plan policies.	Not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
NPWS Conservation Plans and/or Conservation Objectives for SACs and SPAs	Management planning for nature conservation sites has a number of aims. These include: • To identify and evaluate the features of interest for a site • To set clear objectives for the conservation of the features of interest • To describe the site and its management • To identify issues (both positive and negative) that might influence the site • To set out appropriate strategies/management actions to achieve the objectives	• Conservation objectives for SACs and SPAs (i.e. sites within the Natura 2000 network) have to be set for the habitats and species for which the sites are selected. • These objectives are used when carrying out appropriate assessments for plans and projects that might impact on these sites.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Groundwater Protection Schemes	• A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater.	• A Groundwater Protection Scheme aims to maintain the quantity and quality of groundwater, and in some cases improve it, by applying a risk assessment-based approach to groundwater protection and sustainable development.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Local Economic and Community Plans (LECP)	• The overarching vision for each LECP is: "to promote the well-being and quality of life of citizens and communities"	• The purpose of the LECP, as provided for in the Local Government Reform Act 2014, is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the relevant local authority area, both by itself directly and in partnership with other economic and community development stakeholders.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Development Plans, Local Area Plans, Planning Schemes	• Outlines planning objectives for land use development (including transport objectives). • Strategic framework for planning and sustainable development including those set out in National Planning Framework and Regional Economic and Spatial Strategies. • Sets out the policies and proposals to guide development in the specific Local Authority area.	• Identifies future infrastructure, development and zoning required. • Protects and enhances amenities and environment. • Guides planning authority in assessing proposals. • Aims to guide development in the area and the amount of nature of the planned development. • Aims to promote sustainable development. • Provide for economic development and protect natural environmental, heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Green Infrastructure Plans/Strategies	• Promotes the maintenance and improvement of green infrastructure in an area. • Aims to protect and enhance biodiversity and habitats.	not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			environmental protection and management.
Biodiversity Action Plans	• Aims to protect, conserve, enhance and restore biodiversity and ecosystem services across all spectrums.	• Outlines the status of biodiversity and identifies species of importance. • Outlines objectives and targets to be met to maintain and improve biodiversity. • Aims to increase awareness.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Heritage Plans	• Aims to highlight the importance of heritage at a strategic level.	• Manage and promote heritage as well as increase awareness. • Aim to conserve and protect heritage.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
County Landscape Character Assessments	• Characterises the geographical dimension of the landscape.	• Identifies the quality, value, sensitivity and capacity of the landscape area. • Guides strategies and guidelines for the future development of the landscape.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
			achievement of the objectives of the regulatory framework for environmental protection and management.
Freshwater Pearl Mussel Sub- Basin Management Plans	• Identifies the current status of the species and the reason for loss or decline. • Identifies measure required to improve or restore current status.	• Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland. • Outlines restoration measures required to ensure favourable conservation status.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Local Catchment Flood Risk Management Plans	• Produced by Local Authorities. • Outlines areas local flood risk. • Sets out measures to manage and prevent flood risk at a local level.	not applicable	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Shellfish Pollution Reduction Programmes	Aims to improve water quality and ensure the protection or improvement of designated shellfish waters in order to support shellfish life and growth and contribute to the high quality of shellfish products directly edible by	• Identifies key and secondary pressures on water quality in designated shellfish areas. • Outlines specific measures to address identified key and secondary pressures on water quality.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
	man.	• Addresses the specific pressures acting on water quality in each area.	combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Regional Waste Management Plans	These plans (for the Connacht-Ulster, Southern, and Eastern-Midlands regions) give effect to national and EU waste policy, and address waste prevention and management (including generation, collection and treatment) over the period 2015-2021.	To manage wastes in a safe and compliant manner, a clear strategy, policies and actions are required.	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.
Draft Climate Change Action Plans 2019 - 2024	Dublin's four local authorities have joined together to develop Climate Change Action Plans as a collaborative response to the impact that climate change is having, and will continue to have, on the Dublin Region and its citizens. While each plan is unique to its functional area, they are unified in their approach to climate change adaptation and mitigation, and their commitment to lead by example in tackling this global issue.	The Climate Change Action Plan features a range of actions across five key areas - Energy and Buildings, Transport, Flood Resilience, Nature-Based Solutions and Resource Management - that collectively address the four targets of this plan: • A 33% improvement in the Council's energy efficiency by 2020 • A 40% reduction in the Council's greenhouse gas emissions by 2030 • To make Dublin a climate resilient region, by reducing the impacts of future climate change - related events • To actively engage and inform citizens on climate change	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.

Legislation, Plan, etc.	Summary of high level aim/ purpose/ objective	Summary of lower level objectives, actions etc.	Relevance to the Plan
Noise Action Plans	The Noise Action Plans are prepared in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU Directive 2002/49/EC relating to the assessment and management of environmental noise. This Directive sets out a process for managing environmental noise in a consistent manner across the EU and the Noise Regulations set out the approach to meeting the requirements of the Directive in Ireland.	The main purpose of the Noise Action Plan is to: • Inform and consult the public about noise exposure, its effects and the measures which may be considered to address noise problems • Address strategic noise issues by requiring competent authorities to draw up action plans to manage noise issues and their effects • Reduce noise, where possible, and maintain the environmental acoustic quality where it is good	Implementation of the Climate Action Plan needs to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection.

Relevant EU and National Legislation

Legislation[19]	Context
European & National regulations that are relevant to planning the transmission network: • Directive 2009/72/EC concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC; • Directive 2009/ 72/ EC; • Directive 2009/ 28/ EC; • Directive 2012/ 27/ EC; • Statutory Instrument (SI) No. 445 of 2000 as amended; and • Statutory Instrument (SI) No. 147 of 2011.	European regulations, relevant to planning the transmission network.
SEA Directive 2001/42/EC: • European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435 of 2004) as amended; and • European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (S.I. No. 200 of 2011) as amended.	EU Directive 2001/42/EC on the Assessment of the Effects of Certain Plans and Programmes on the Environment (the SEA Directive) established the requirement for SEA as part of high-level decision-making process and the development of plans and programmes.
EU Energy Efficiency Directive 2012/27/EU	EU Directive 2012/27/EU establishes a set of binding measures to help the EU reach its 20% energy efficiency target by 2020. Under the Directive, all EU countries are required to use energy more efficiently at all stages of the energy chain from its production to its final consumption.
EU Renewable Energy Directive 2009/28/EC	Establishes an overall policy for the production and promotion of energy from renewable sources in the EU. It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020 – to be achieved through the attainment of individual national targets.
Water Framework Directive (2000/60/EC): • Env. Quality Standards Directive 2008/105/EC; • The Water Policy Regulations (S.I. No. 722 of 2003); • The Surface Waters Regulations (S.I. No. 272 of 2009); and • The Groundwater Regulations (S.I. No. 9 of 2010).	The EU Water Framework Directive requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. It applies to rivers, lakes, groundwater, and transitional coastal waters. The Directive requires that management plans be prepared on a river basin basis and specifies a structured method for developing these plans.
Birds Directive (2009/147/EC) and Habitats Directive (92/43/EEC): • European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011); and • European Communities (Birds and Natural Habitats) (Amendment) Regulations 2015 (S.I. No. 355 of 2015).	The EU Birds Directive requires all EU Member States to take measures to protect all wild birds and their habitats. The Birds Directive aims to protect all of the 500 wild bird species naturally occurring in the European Union. The EU Habitats Directive requires all EU Member States to ensure the conservation of a wide range of rare, threatened or endemic animal and plant species. Within this Directive, some 200 rare and characteristic habitat types are also

Legislation[19]	Context
	targeted for conservation in their own right.
Marine Strategy Framework Directive (2008/56/EC): • European Communities (Marine Strategy Framework) Regulations (S.I. No. 249 of 2011).	The EU Marine Strategy Framework Directive (Marine Directive) requires all EU Member States to take measures to protect more effectively the marine environment across Europe. The Marine Directive aims to achieve 'Good Environmental Status, (GES)' of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend.
Maritime Spatial Planning Directive (2014/89/EU)	The EU Spatial Planning Directive requires member states to work across borders and sectors to ensure that any human activities at sea are carried out in an efficient, safe and sustainable manner. In Ireland, a roadmap to the development of Ireland's first marine spatial plan, towards a Marine Spatial Plan for Ireland' was published in December 2017. It Is expected that the final plan will be prepared for submission to the Government.
Environmental Impact Assessment Directive (2014/52/EU): • Not yet transposed as Irish National Legislation, expected before 2017.	The EU EIA Directive (2014/52/EU) amends the previous EIA Directive (2011/92/EU) on the assessment of the effects of certain public and private projects on the environment. It introduced changes in EIA requirements across the EU such as the introduction of mandatory 'Competent Experts', changes to screening procedures, and mandatory post-EIA monitoring. This Directive was expected to be enforced in Ireland by May 2017 but came into effect in September 2018.
2020 Climate and Energy Package and associated legislation	This package is comprised of a set of binding legislation to ensure the EU meets its climate and energy targets for the year 2020.The package sets three key targets as follows: • 20% cut in greenhouse gas emissions (from 1990 levels); • 20% of EU energy from renewables; and • 20% improvement in energy efficiency.
The Climate Action and Low Carbon Development Act 2015	The Climate Action and Low Carbon Development Act 2015, provides for the making of five-yearly National Mitigation Plans to specify the policy measures to reduce greenhouse gas emissions and a National Adaptation Framework to specify the national strategy for the application of adaptation measures in different sectors and by Local Authorities to reduce the vulnerability of the State to the negative effects of climate change.
Flood Directive (2007/60/EC): • European Communities (Assessment and Management of Flood Risks) Regulations 2010. (S.I. No. 122 of 2010).	The EU 'Floods Directive' requires all EU Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk.
Non-exhaustive list of Planning related legislation: • Planning and Development Act 2000; • Planning and Development (Strategic Infrastructure) Act 2006; and • Planning & Development Regulations 2001-2015.	Irish Planning related legislation that is relevant to planning the transmission network.

Legislation[19]	Context
Non-exhaustive list of Cultural Heritage related legislation: • National Monuments Act 1930 as amended; • Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999; and • The Heritage Act 1995.	Irish Cultural Heritage regulations that are relevant to the planning the transmission network.
Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC): • Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011).	Set down air quality standards in Ireland for a wide variety of pollutants.
Integrated Pollution Prevention Control Directive (96/61/EC replaced by 2008/1/EC): • Environmental Protection Agency Act 1992, amended by the Protection of the Environment Act 2003; and • Environmental Protection Agency (Integrated Pollution Control) (Licensing) Regulations 2013.	Regulates the licencing of industrial sites, including energy production.
Noise Directive (2002/49/EC): • Environmental Noise Regulations 2006 (S.I. No. 140 of 2006).	EU and Irish environmental noise related legislation.

Relevant Plans and Programmes

Scale	Plan or Programme	Context
International / EU	The Kyoto Protocol	• First international agreement in which many of the world's industrial nations concluded a verifiable agreement to reduce their emissions of six greenhouse gases in order to prevent global warming.
	EU Biodiversity Strategy	• The EU Strategy aims to halt the loss of biodiversity and ecosystem services in the EU and help stop global biodiversity loss by 2020. It reflects the commitments taken by the EU in 2010, within the international Convention on Biological Diversity.
	UK Marine Policy Statement	• This Statement is the framework for preparing marine plans and taking decisions affecting the marine environment and was jointly adopted across the UK Administrations including the Department of the Environment in Northern Ireland.
National	National Planning Framework (NPF): Ireland 2040: Our Plan	• 20-year strategy identifying strategic development requirements, infrastructure requirements and promoting sustainable strategies for the future.
	National Development Plan 2018 – 2027	• Sets out the investment priorities that will underpin the successful implementation of the National Planning Framework.
	National Development Plan (NDP) 2007-2013	• Promotes security of energy supply, competitive prices and long-term energy diversification.
	National Spatial Strategy (NSS) 2002-2020	• 20-year planning framework for Ireland. Contains energy-related provisions for the significant development of the transmission network and new energy generation in regions across the country.
	Capital Investment Plan 2016 – 2021	• Framework for investment in infrastructure in Ireland 2016-2021.
	Energy White Paper: Delivering a Sustainable Energy Future for Ireland-the Energy Policy Framework 2007-2020	• Actions to achieve electricity supply which consistently meets demand and sets a target to meet 33% of consumption from renewable energy by 2020.
	Framework for Sustainable Development in Ireland (2012)	• Outlines Ireland's Framework for Sustainable Development. Its timeframe is to 2020 to tie in with other national and international frameworks, but a longer-term horizon to 2050 is also considered where appropriate, to provide a framework for guiding and reporting on long-term broad development trends such as on climate change.
	National Renewable Energy Action Plan	• Outlines Ireland's national trajectories for the share of energies from renewable sources consumed in transport, electricity, heating and cooling between now and 2020.
	National Climate Change Adaptation Framework (2012)	• Provides the policy context for a strategic national adaptation response to climate change in Ireland and is designed to evolve over time as planning and implementation progresses, and as further evidence becomes available.
	National Mitigation Plan (2017)	• Outlines measures for transitioning Ireland to a low carbon, climate resilient and environmentally sustainable economy by 2050.

Scale	Plan or Programme	Context
		• Includes over 100 individual actions for various Ministers and public bodies to take forward as we move to implementation of what will be a living document.
	National Energy Efficiency Action Plan 3 (NEEAP) (2014)	• Each NEEAP outlines the energy efficiency measures that will be implemented to reach the national energy saving targets as well as the progress towards this target.
	Renewable Electricity Policy and Development Framework (DCCAE, ongoing).	• The aim of this framework is to guide the development of renewable electricity projects.
	Wind Farm Development Guidelines 2006 (currently under review)	• Outline the guidelines to planning authorities on planning for wind energy through the development plan process and in determining planning permission.
	Offshore Renewable Energy Development Plan (OREDP) including interim review	• Describes the policy context for the development of offshore wind, wave and tidal energy in Irish waters.
	Water Service Strategic Plan (WSSP)	• Provides strategic objectives for the delivery of water services up until 2040.
	A National Landscape Strategy (NLS) for Ireland	• Mapping out paths toward sustainable development and management of national-human and natural-resources. This includes the Future National Landscape Character Assessment.
	National Biodiversity Plan (NBP)	• Actions to raise awareness about the link between plans/programmes and biodiversity impacts.
	National Heritage Plan (published in 2002)	• Outlines stipulations for proper planning, conservation and management of national heritage for all plans/programmes.
	The Irish Geological Heritage Programme 1998 - ongoing	• Promotes awareness and protection of significant geological heritage sites.
	Government Policy Statement on Strategic Importance of Transmission and Other Energy Infrastructure 2012	• Endorses the major investment underway in the high voltage electricity transmission system under EirGrid 's Grid25 Programme.
	National Policy Framework on Alternative Fuels Infrastructure for Transport (AFF)	• Sets an ambitious target that by 2030 all new cars and vans sold in Ireland will be zero emissions (or zero emissions capable) with the use of fossil fuels vehicles rapidly receding.
	Ireland and the Climate Change Challenge - Connecting How Much with How to (2012)	• Outlines the National Economic and Social Council Secretariat's vision for Ireland in 2050 as a carbon-neutral society. The report also outlines proposals for a pragmatic approach toward climate change.
	River Basin Management Plans & draft River Basin Management Plan	• Plan setting out the status of waters in the River Basin Districts (RBDs); the proposed environmental objectives and the draft programme of measures to achieve those objectives by 2021.
	Flood Risk Management Plans (FRMP) 2017	• Plans which set out a range of proposed measures and actions to manage and reduce flood risk within the catchments and costal reaches covered by each Plan, focussing on the 300 areas of potentially significant flood risk around Ireland that were previously identified under the Preliminary Flood Risk Assessment (PFRA). These areas are referred to under the programme as Areas for Further Assessment (AFA).

Scale	Plan or Programme	Context
	Catchment Flood Risk Assessment and Management Programme	• Delivers on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU 'Floods' Directive; central to the medium to long-term strategy for the reduction and management of flood risk in Ireland.
	Regional Spatial and Economic Strategies (RSEs)	• Act as building-blocks for sub-regional spatial and economic planning and statutory committees.
	County Development Plans (various dates)	• Provides detailed county-level strategies to allow for the proper planning and sustainable development of an area.
	County Wind Energy Strategies	• Provides recommendations for wind energy development policy and practice.
	County Renewable Energy Strategies	• Provides for the preparation of County-level renewable energy strategies.
	Regional Spatial and Economic Strategies (RSEs)	• Act as building-blocks for sub-regional spatial and economic planning and statutory committees.
	County Biodiversity and or Heritage Plans (were available, various dates)	• Outlines stipulations for proper planning, conservation and management of biodiversity and heritage for all plans/ programmes at a county level.
	County Landscape Character Assessments (LCA)	• The LCA classifies and describes the landscape in a county.
	County based waste management strategies and mineral plans	• Establishes a framework for the sustainable management of wastes generated in the county.
	County-based recreation strategies	• Develops a framework to coordinate the objectives and targets of key stakeholders in a cohesive and integrated plan for the county, ensuring the provision, management and use of quality facilities and services for everyone, including future generations.
	Local, City, Town and Electoral Area/Development Plans (where available, various dates)	• Statutory requirements for proper planning and sustainable development of a local area.
EirGrid Plans	Your Grid, Your Tomorrow: Ireland's Grid Development Strategy 2016.	• Explain the need for, and drivers of, grid development.
	Transmission Development Plan (TDP)	• Annual rolling operational document outlining the Draft Grid IP for the development of the ITS and interconnection.

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 2

Consultation Feedback

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Regional Inspectorate,
Inniscarra,
County Cork, Ireland
Cigireacht Réigiúnach, Inis Cara
Chontae Chorcaí, Éire

T: +353 21 487 5540
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E: info@epa.ie
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LoCall: 1890 33 55 99

By email to: climate@corkcoco.ie

Mr Paul Collins
Environment – Energy & Climate Change
Cork County Council
County Hall
Cork
T12 R2NC

23rd August 2023 Our Ref: SCP230807.1

Re. SEA Scoping for the Cork Local Authority Climate Action Plan 2024-2029

Dear Mr Collins,

We acknowledge your notice, dated 15th August 2023, in relation to the Cork Local Authority Climate Action Plan 2024-2029 ('the Plan').

The EPA is one of the statutory environmental authorities under the SEA Regulations. In our role as an SEA environmental authority, we focus on promoting the full and transparent integration of the findings of the Environmental Assessment into the Plan and advocating that the key environmental challenges for Ireland are addressed as relevant and appropriate to the plan. Our functions as an SEA environmental authority do not include approving or enforcing SEAs or plans.

Where we provide specific comments on plans and programmes, our comments will focus on the EPA's remit and areas of expertise (in particular water, air, climate change, waste, resource efficiency, noise, radon and the inter-relationships between these and other relevant topics e.g. biodiversity), as appropriate and relevant to the particular plan or programme.

This submission highlights a number of key environmental issues to consider in preparing the Plan and SEA. Some key comments and recommendations are provided below. Appendix I includes comments on the SEA Scoping report, Appendix II includes a list of high-level plans and programmes to consider, as appropriate and relevant, and Appendix III provides links to various environmental resources that may be useful to you.

EPA Comments and Recommendations

The scale of the challenge facing Ireland to address climate change is significant, as highlighted in our State of Environment Report '*Ireland's Environment - An Integrated Assessment 2020*'[1] (EPA, 2020). We urgently need to accelerate action to reduce our greenhouse gas emissions and implement adaptation measures to increase our resilience to climate change.

We welcome that the Plan will set out a framework of climate actions to be carried out by Cork County Council, in collaboration with other key stakeholders, over the five-year period from 2024 to 2029. This includes establishing climate action related strategic goals, high level objectives to support the delivery of these goals and also actions that are time-bound, measurable and focused on local level climate action.

We acknowledge that draft strategic goals look to address energy, the built environment and related infrastructure, transportation, natural environment and green infrastructure, Economic development and green enterprise/business, community resilience and just transition, and Governance related aspects. We also acknowledge that the Plan will take account of both climate mitigation and climate adaptation actions.

We recognise the importance of ensuring that the National Transition Objective is underpinned by a clean, healthy and well-protected environment. It is important, in developing and implementing the Plan, that it is set within the context of a wider and more integrated approach to environmental protection.

We note that the Plan will progress the climate adaptation and mitigation required at a local level and will support

- a clear pathway to implement national climate policy locally, and prioritise action on evidence-focused climate measures that need to be taken
- Help deliver the climate neutrality objective at both a local and community level
- Identify and implement a 'Decarbonising Zone' to assist trialling a range of climate mitigation, adaptation and biodiversity measures through identifying projects to help deliver on the National Climate Objective.

The SEA should play a key role in ensuring that this is achieved and should inform decision-making around the assessment and selection of actions and measures. The SEA should also assist in identifying ways to maximise the potential co-benefits of climate-related measures for air quality, human health, biodiversity, water quality and other

[1] https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report-/

interrelated areas (i.e. win-win solutions). A key role of SEA is in assessing and informing the selection and refinement of actions and measures that maximise the co-benefits of climate actions for the wider environment and society. This should be highlighted in the SEA Report and the Plan.

You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation, (such as the latest National Climate Action Plan) as well as any relevant sectoral or regional adaptation plans and adjacent local authority climate action plans. The Plan should include a commitment to consider any relevant updated actions, measures or recommendations that may arise in updates to the National Climate Action Plan over the lifetime of the Plan.

The Plan and SEA should take into account the recent Climate Council Annual Review report, which is available at:
https://www.climatecouncil.ie/councilpublications/annualreviewandreport/CCAC-AR-2023-FINAL%20Compressed%20web.pdf

Additionally, the relevant objectives and policy commitments of the National Planning Framework, the Regional Spatial and Economic Strategy for the Southern Region, the County Development Plan and the Cork City Development Plan should be aligned with and considered, as appropriate.

Greenhouse Gas Emissions
In preparing the Plan and SEA, the direct and indirect impacts of the Plan on greenhouse gas emissions and removals should be assessed. The Agency's most recent projections reports Ireland's Greenhouse Gas Emissions Projections 2022-2040 (EPA, 2023) and Ireland's Provisional Greenhouse Gas Emissions 1990-2022 (EPA, 2023) should be taken into account.

The Climate Action Plan identifies actions to decarbonise electricity generation, the built environment and transport and to move towards carbon neutrality for agriculture, forest and land use sectors. The Plan should also integrate and align with the relevant actions in the Climate Action Plan, as appropriate.

Climate Adaptation
In preparing the Plan and SEA, you should consider how the impacts of climate change, individually and in combination, are likely to influence the implementation of the Plan. The Plan should look to improve resilience of existing and planned critical infrastructure, systems and procedures to the effects and variability of climate change. Vulnerable populations should be considered in the context of just transition/adaptation. The cascading effects of proposed adaptation measures should also be considered. Recent extreme weather events could be useful to assist in identifying areas where for further work is needed to improve resilience, e.g. the resilience of critical water service infrastructure to flooding and drought.

The Plan should include appropriate adaptation measures that can be implemented either directly or through relevant land use plans and/or specific plans e.g. Flood Risk Management Plans, River Basin Management Plans etc. The Plan will also help inform local authority land use and transport planning.

Additional aspects to consider may include changes in native species and habitats and the spread of invasive species, pests and pathogens. In this regard, the Plant Atlas 2020 project looking at Ireland's changing flora might be useful to consider. A summary of this results can be found at: https://bsbi.org/wp-content/uploads/dlm_uploads/2023/02/BSBI-Plant-Atlas-2020-summary-report-Ireland-WEB.pdf

Water Quality

The Plan should take into account the most recent Water Framework Directive water quality status and risk information, available on the EDEN WFD app. Relevant future projections of river flow are available in either EPA research reports (such as HydroPredict, pending), or academic papers related to these projects.

Air quality

The Plan should take into account the Draft *National Clean Air Strategy* (DECC). The *Air Quality in Ireland 2021 Report* (EPA, 2022) sets out the most recent status in each of the four air quality zones in Ireland and may be useful to consider.

Data on levels of atmospheric pollutants from the EPA's national ambient air quality monitoring network should also be integrated as appropriate. The pollutants of most concern are traffic-related, including Particulate Matter and Nitrogen Dioxide.

Recent EPA Climate change related publications

Some recent climate change publications that may be useful to consider in preparing the SEA and the Plan are shown below:

- Ireland's Greenhouse Gas Emissions Projections 2022-2040 (EPA, 2023)
- Ireland's Final Greenhouse Gas Emissions 1990-2021 (EPA, 2023)
- Ireland's Provisional Greenhouse Gas Emissions 1990-2022 (EPA, 2023)
- Climate Change's Four Irelands (EPA, 2022)
- Ireland's Air Pollutant Emissions 2021 (1990-2030) (EPA, 2023)

Additionally, further reports/publications are available at: can be consulted at https://www.epa.ie/publications/monitoring--assessment/climate-change/.

Research report 429: Building Coastal and Marine Resilience in Ireland (EPA, 2023) may be useful to consider. It discusses the need for identification and increased awareness of climate change risks to Ireland's coastal communities. It also highlights the importance of building national resilience across socio-ecological and economic systems.

Other climate- related environmental research reports are available at: https://www.epa.ie/publications/research/climate-change/

Environmental Authorities
Under the SEA Regulations, you should consult with:

- Environmental Protection Agency;
- Minister for Housing, Local Government and Heritage;
- Minister for Environment, Climate and Communications;
- Minister for Agriculture, Food and the Marine.

The EPA may provide additional comments upon receipt of the SEA Environmental Report and Draft Plan/Programme/Variation at the next stage of the SEA process.

If you have any queries or need further information in relation to this submission, please contact me directly at c.omahony@epa.ie. I would be grateful if you could send an email confirming receipt of this submission to: sea@epa.ie.

Yours Sincerely,

_____

Cian O'Mahony
SEA Section
Office of Radiation Protection and Environmental Monitoring
Environmental Protection Agency

Appendix I – Comments on the Scoping Report

Scope of the SEA

The Plan should clearly set out the scope, remit and implementation related elements of the Plan. These will have implications for the SEA, in terms of guiding the level of assessment applicable at the appropriate level for the Plan. Where it is envisaged that measures proposed in the Plan will be implemented via other plans, which themselves have been or will be subject to SEA, this should be explained in the Environmental Report and taken into account in the assessment.

Where specific measures will be implemented directly, further detail should be provided in the Environmental Report and Plan on the relevant environmental assessments to be carried out at the project stage and relevant mitigation measures to be applied, as appropriate. There may be merit in exploring this issue further with the relevant environmental authorities during the Plan preparation and SEA processes. Some additional aspects to consider are shown below:

Air and Water Quality

Air quality and water quality considerations should also be included in the list of aspects to be considered in relation to population and human health.

Issues around equity and how vulnerable groups can be best assisted in dealing with and adapting to climate change should be considered, as relevant to the Plan.

In *Table 4.1 – Draft Strategic Environmental Objectives*, the Strategic Environmental Objective (SEO) W3 for Water could be improved by including a commitment to take account of the programme of measures in the River Basin management Plan, as relevant and appropriate. For Climate Change objectives, consider reference to improving the resilience of the County to the effects of climate change. Also consider including an objective to contribute to minimising greenhouse gas emissions within the County.

Tourism and Recreation objective should also look to support efforts at encouraging supporting efforts to improve the vulnerability of tourism and recreation from the effects of climate change. Promoting circular economy considerations to the tourism sector will also help reduce resource and energy use, active and public transport travel tourism transport options will also contribute to climate mitigation from transport related travel.

Water Resources

With regards flooding, the Plan should consider the need for appropriate zoning and development of lands to avoid incompatible land uses in areas at risk of significant flooding.

Soils / Geology

The protection of high nature value farming areas, and key agricultural lands should be considered.

Where natural resources are required to support development, these should be utilised out as efficiently as possible.

Landscape

The key issues for the SEA to consider could also include the potential 'visual impact' of any proposed measures with potential to impact on sensitive landscape areas.

Material Assets

Transportation: The Plan should align with the transport commitments in the National Planning Framework, Regional Spatial and Economic Strategy for the Southern Region, and the Cork Metropolitan Area Transport Strategy, where appropriate and relevant.

Water Supply: Uisce Eireann's National Water Resources Adaptation Framework (and any relevant Regional Water Resource Plans) takes account of potential climate change implications for drinking water supply/service provision and may be also useful to consider.

Cross-cutting issues

Climate change will affect all aspects of our economy and society, with many issues impacting on the operations of individual local authorities. In implementing the Plan and in responding effectively to climate change, coordination, and collaboration among stakeholders on cross-cutting issues is needed.

EPA State of the Environment Report

Our State of Environment Report, *Ireland's Environment - An Integrated Assessment 2020* (SOER2020) identifies thirteen 'Key Messages for Ireland'. Delivering Ireland's long-term sustainable development and environmental objectives will involve many different stakeholders to address these key actions. The report recognises the need for full implementation of existing environmental legislation and review of governance/coordination on environmental protection across public bodies. Specifically, information provided in the following chapters should be considered, as appropriate and relevant.

- Chapter 2 (Climate) highlights the clear need for systemic change in Ireland to ensure the country will become the climate neutral and climate resilient society it aspires to be. More urgency is needed to deliver actions on climate mitigation and adaptation and to ensure that Ireland meets its international obligations to reduce greenhouse gas (GHG) emissions. Further measures are required to meet national and EU ambitions to keep the global temperature increase to 1.5°C. These measures will contribute to Ireland achieving climate neutrality by 2050.

- Chapter 11 (Transport). The transport sector has a significant impact on the environment, including being responsible for 20 per cent of Ireland's greenhouse gas emissions. A sustainable mobility transformation is required, with the next decade crucial, whereby necessary journeys are made by sustainable modes such as walking, cycling and public transport, followed by using electric vehicles where

unavoidable. For this transformation to happen the measures relating to transport in the Climate Action Plan, and other necessary measures, must be fast tracked. Long-term, integrated spatial and transport planning can achieve compact development and move trips to other modes of transport, including cycling and should be supported in the Plan. Shifting to these modes is an essential part of a sustainable and climate-neutral transition for the transport sector.

- Chapter 12 (Energy). Almost 90% of our total energy use is provided by combustion of mostly imported fossil fuels, which is unsustainable, and we need to begin fast tracking measures within the Climate Action Plan and other necessary solutions. This will involve strategic planning to transform this situation by 2050. Transitioning to using clean energy is essential for the protection of human health, our climate and the wider environment and will help support sustainable development of our society and economy.

- Other chapters to consider include Chapter 6 (Nature) and Chapter 13 (Environment and Agriculture).

The EPA are currently preparing the next iteration of the SOER report. This will be published in 2024. We recommend that a commitment is made in the Plan, to take account of any relevant recommendations in the SOER 2024 report, once published, in implementing the Plan over its lifetime.

Integration of SEA and Plan

All recommendations from the SEA and AA processes, including mitigation measures, should be fully integrated in the Plan. We recommend that the Plan includes summary tables outlining the key findings of the SEA and linking the significant environmental effects identified to the proposed mitigation measures, monitoring programme and Plan policies/measures.

Monitoring, Implementation & Reporting

The Plan should include a commitment to implement the environmental monitoring programme and associated reporting set out in the Environmental Report. We suggest including a separate section on '*Monitoring, Implementation and Reporting*' in the Plan, setting out the provisions for monitoring and reporting on the implementation of the Plan and periodic reviews. There may be merits in aligning the periodic reviews of the Plan with existing cyclical reporting e.g. *Ireland's Environment*, National Planning Framework, Water Framework Directive, Marine Strategy Framework Directive etc.

In between review periods for the Plan, we recommend that Plan-related implementation reports are published annually, or biennially, as appropriate. We recommend aligning these Plan implementation monitoring/reporting with the environmental monitoring required under the SEA legislation. Doing so would enable the environmental performance of the Plan to be evaluated and would also provide for increased transparency during implementation.

The SEA-related monitoring should address positive, negative and cumulative effects where they are likely to occur and should include provision for on-going review to facilitate an early response to any significant environmental issues that may arise. The Environmental Report should specify the monitoring frequency and responsibilities and include provisions for reporting on the monitoring. To avoid duplication in data collection, the same indicators should be used for the plan-related and SEA-related monitoring where possible.

Consideration of other key Plans and Programmes

You should ensure that the Plan aligns with national commitments on climate change mitigation and adaptation. Actions and measures proposed should be consistent with the *Climate Action and Low Carbon Development (Amendment) Act, 2021* and the Climate Action Plan, as well as considering any relevant sectoral and regional climate adaptation plans. The SEA and Plan should consider any relevant aspects of sectoral and regional and local adaptation plans, including the *Climate Adaptation Strategy for Regional and Local Roads* (DECC, 2023).

The Plan will be a key element linking national and international policy commitments with climate action within the local authority area at a community and local level. We also recognise that local authorities will set out in their own local authority climate action plans, their targets to achieve the 50% improvements in energy efficiency, under the Climate Action Plan, as well as the 51% reduction in Greenhouse gas emissions set out in the Climate Action and Low Carbon Development (Amendment) Act 2021.

We recommend including a flow diagram or/ schematic, illustrating where the Plan fits within the hierarchy of land-use, climate and related plans. We also recommend including schematics in the Plan and SEA Environmental Report, showing the links and key inter-relationships with other key relevant national, regional, sectoral and environmental plans/programmes.

Data & Knowledge Gaps

The SEA should identify any significant data and knowledge gaps, including commitments to help address these on a priority basis during the implementation phase of the Plan. This is with a view to strengthening the evidence base for future reviews and iterations of the Plan.

Available Guidance & Resources

Climate : The 'Climate Ireland' website provides information, support and advice to help local authorities, sectors and government departments to adapt to climate change and includes a Local Authority Adaptation Support Wizard. It can be consulted at http://www.climateireland.ie/#/

SEA: Our website contains various SEA resources and guidance, including SEA process guidance and checklists, Inventory of spatial datasets relevant to SEA, topic specific SEA

guidance (including *Integrating climatic factors into SEA* (EPA, 2019), *Good practice note on Cumulative Effects Assessment* (EPA, 2020), *Guidance on SEA Statements and Monitoring* (EPA, 2023), *Developing and Assessing Alternatives in SEA* (EPA, 2015), and *Integrated Biodiversity Impact Assessment* (EPA, 2012)).

You can access these guidance notes and other resources at: https://www.epa.ie/our-services/monitoring--assessment/assessment/strategic-environmental-assessment/sea-topic-and-sector-specific-guidance-/

Environmental Sensitivity Mapping (ESM) Webtool

The ESM Webtool is a decision support tool to assist SEA and planning processes in Ireland. The tool brings together over 100 datasets and allows users to explore environmental considerations within a particular area and create plan-specific environmental sensitivity maps. These maps can help planners anticipate potential land-use conflicts and help identify suitable development locations, while also protecting the environment. The ESM Webtool is available at www.enviromap.ie.

EPA SEA GIS Search and Reporting Webtool

Our SEA GIS Search and Reporting Webtool is publicly available through EPA Maps at https://gis.epa.ie/EPAMaps/SEA. It allows public authorities to produce an indicative report on key aspects of the environment in a specific geographic area. It is intended to assist public authorities in SEA screening and scoping exercises.

EPA WFD Application

Our WFD Application provides a single point of access to water quality and catchment data from the national WFD monitoring programme. The Application is available via www.catchments.ie.

EPA AA GeoTool

Our AA GeoTool application has been developed in partnership with the NPWS. It allows users to a select a location, specify a search area and gather available information for each European Site within the area. It is also available through EPA https://gis.epa.ie/EPAMaps/AAGeoTool.

Appendix II – Suggested high level plans to consider

National		
Planning	-	National Planning Framework (DHLGH)
	-	Rural Development Programme (DAFM)
Agriculture	-	CAP Strategic Plan 2023-2027 / FoodVision 2030 / Agri Food Strategy 2030 (DAFM)
Biodiversity	-	National Biodiversity Action Plan (DHLGH)
Climate	-	Climate Action Plan 2023 (DECC) – CAP 2024 in preparation
	-	Sectoral Climate Change Adaptation Strategies and Low Carbon Roadmaps
	-	National Adaptation Framework (DECC)
	-	National Policy Position on Climate Action and Low Carbon Development (DECC)
	-	EU Climate Adaptation Strategy 2021
Energy	-	National Renewable Electricity Policy Framework (in preparation DECC)
	-	Grid 25 Implementation Strategy (Eirgrid)
	-	Framework for Alternative Fuel Infrastructure in Transport (DoT)
	-	Offshore Renewable Energy Development Plan I and II –in preparation (DECC)
	-	National Bioenergy Plan (DECC)
Forestry	-	Ireland's Forest Strategy 2022-2030, Forestry Programme 2023-2027 (DAFM)
Landscape	-	National Landscape Strategy (DHLGH)
Tourism	-	10 Year Tourism Strategy (Fáilte Ireland)
Transport	-	Smarter Transport / Strategic Framework for Integrated Land Transport (DoT)
	-	National Greenway Strategy (DoT)
	-	Draft All Island Strategic Rail Review
	-	National Investment Framework for Transport Investment
National Overview	-	State of the Environment Report 2020 (EPA)
Waste	-	Waste Action Plan for a Circular Economy (DECC, 2020)
	-	National Hazardous Waste Management Plan 2021-2027 (EPA)
Water	-	National River Basin Management Plan for Ireland (DHLGH)
	-	National Marine Planning Framework (DHLGH)
	-	Water Services Strategic Plan (Irish Water)
	-	Capital Investment Programme (Irish Water)
	-	Water Resources Management Plan (Irish Water)
	-	National CFRAMS Programme (OPW)
Regional/Local		
Planning	-	Regional Spatial and Economic Strategies
Energy	-	County Renewable Energy / Wind Energy Strategies
Tourism	-	Regional Tourism Strategies
	-	County Tourism Strategies / Visitor Experience Development Plans
Waste	-	Regional Waste Management Plans
Water	-	Relevant CFRAMS Flood Risk Management Plans
Transport	-	Cork Metropolitan Area Transport Strategy ,
	-	Existing Greenways/Blueways including the proposed Lee to Sea Greenway

Appendix III – Links to environmental guidance /reports/resources

Air	https://www.epa.ie/publications/monitoring--assessment/air/
Bathing Water	https://www.epa.ie/publications/monitoring--assessment/freshwater--marine/
Biodiversity	http://www.npws.ie/guidance-appropriate-assessment-planning-authorities http://www.npws.ie/publications
Climate Action	https://www.dccae.gov.ie/en-ie/climate-action/Pages/default.aspx https://www.epa.ie/publications/monitoring--assessment/climate-change/ https://www.climateireland.ie/
Cumulative Effects Assessment	https://www.epa.ie/publications/monitoring--assessment/assessment/good-practice-guidance-on-cumulative-effects-assessment-in-sea.php
DHPLG Guidelines / Legislation	https://www.housing.gov.ie/planning/planning
Drinking Water	https://www.epa.ie/publications/monitoring--assessment/drinking-water/
EIA	https://www.housing.gov.ie/planning/planning
Energy Conservation	www.seai.ie
Flood Risk	https://www.flooding.ie/Planning/
Geology / Geomorphology	www.gsi.ie
Ground Water	https://www.epa.ie/our-services/monitoring--assessment/freshwater--marine/groundwater/
Landscape Character Assessment	http://www.heritagecouncil.ie/
Marine	https://www.marine.ie/Home/home
SEA EPA resources	https://www.epa.ie/publications/monitoring--assessment/assessment/ Updated Draft SEA Guidelines (DHLGH, 2021)
State of Environment	https://www.epa.ie/our-services/monitoring--assessment/assessment/irelands-environment/state-of-environment-report-/
Surface Water	https://www.epa.ie/our-services/monitoring--assessment/freshwater--marine/#
Transportation	https://www.nationaltransport.ie/planning-policy/ https://www.tii.ie/technical-services/environment/
Waste Management	https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/ https://www.epa.ie/our-services/monitoring--assessment/waste/

In relation to adaptation and the potential effects of climate change on Agriculture, there are a number of measures that can be applied to build resilience, many of which can also have benefits from a mitigation perspective.

Maintaining a fodder reserve on farm can address the effects of longer and wetter winters as well as poorer weather conditions in spring at the start of the grazing season. The Teagasc advisory service and private Agricultural Consultants are available to provide the appropriate advice to farmers. Diversification in agricultural systems will increase resilience of farms to climate change and reduce the economic risk.

Creating further resources to harbour and restore biodiversity improve resilience to climate change. The planting of trees and forestry can contribute to carbon sequestration, and biodiversity by providing a more diverse ecosystem to build resilience. Improvements in soil structure, management and health by increasing soil organic carbon will enhance water holding capacity beneficial for drought conditions as well as high rainfall events. Peatland restoration will also improve water holding capacity as well as water quality.

Changes in climate can encourage an increase in exotic pests and diseases including invasive species - which would have a negative impact on biodiversity if measures to promote resilience are not put in place. Equally, warmer and wetter climatic conditions encourage increased disease pressure in livestock, for instance an increased prevalence of liver fluke.

An Roinn Comhshaoil,
Aeráide agus Cumarsáide
Department of the Environment,
Climate and Communications

Geological Survey
Suirbhéireacht Gheolaíochta
Ireland | Éireann

Cork County Council
County Hall
Carrigrohane Road
Cork

31 August 2023

Re: Cork County Council Climate Action Plan 2024-2029

Your Ref: n/a
Our Ref: 23/245

Dear Sir/Madam,

Geological Survey Ireland is the national earth science agency and is a division of the Department of the Environment, Climate and Communications. We provide independent geological information and gather various data for that purpose. Please see our website for data availability. We recommend using these various data sets, when conducting the EIAR, SEA, planning and scoping processes. Use of our data or maps should be attributed correctly to 'Geological Survey Ireland'.

The publicly available data referenced/presented here, should in no way be construed as Geological Survey Ireland support for or objection to the proposed development or plan. The data is made freely available to all and can be used as independent scientific data in assessments, plans or policies. It should be noted that in many cases this data is a baseline or starting point for further site specific assessments.

With reference to your email received on the 30 August 2023, concerning the Cork County Council Climate Action Plan 2024-2029, Geological Survey Ireland would encourage use of and reference to our datasets. This data can add to the content and robustness of the SEA process. With this in mind please find attached a list of our publicly available datasets that may be useful to the environmental assessment and planning process. We recommend that you review this list and refer to any datasets you consider relevant to your assessment. The remainder of this letter and following sections provide more detail on some of these datasets.

Geoheritage

Geological Survey Ireland is in partnership with the National Parks and Wildlife Service (NPWS) in the Department of Culture, Heritage and the Gaeltacht to identify and select important geological and geomorphological sites throughout the country for designation as geological NHAs (Natural Heritage Areas). This is addressed by the Geoheritage Programme in Geological Survey Ireland, under 16 different geological themes, in which the minimum number of scientifically significant sites that best represent the theme were rigorously selected by a panel of theme experts.

County Geological Sites (CGSs) have been adopted in the National Heritage Plan, and will form a major strand of geological nature conservation to complement the various ecological and cultural conservation measures. It is important to note however, that management issues for the majority of geological heritage sites may differ from ecological sites. County Geological Sites are the optimal way of addressing the responsibility of each authority under the Planning and Development Act 2000 and its amendments, to protect sites of geological interest.

The audit for Co. Cork commenced in 2021; it is a three year process that will be completed in 2024. However, unaudited CGSs can be viewed online under the Geological Heritage tab on the online Map Viewer.

Groundwater

Geological Survey Ireland's Groundwater and Geothermal Unit, provides advice, data and maps relating to groundwater distribution, quality and use, which is especially relevant for safe and secure drinking water supplies and healthy ecosystems.

Proposed developments need to consider any potential impact on specific groundwater abstractions and on groundwater resources in general. We recommend using the groundwater maps on our Map viewer which should include: wells; drinking water source protection areas; the national map suite - aquifer, groundwater vulnerability, groundwater recharge and subsoil permeability maps. For areas underlain by limestone, please refer to the karst specific data layers (karst features, tracer test database; turlough water levels (gwlevel.ie). Background information is also provided in the Groundwater Body Descriptions.

Please read all disclaimers carefully when using Geological Survey Ireland data.

GWClimate is a groundwater monitoring and modelling project that aims to investigate the impact of climate change on groundwater in Ireland. This is a follow on from a previous project (GWFlood) and the data may be useful in relation to Flood Risk Assessment (FRA) and management plans. Maps and data are available on the Map viewer.

Geological Survey Ireland has completed Groundwater Protection Schemes (GWPSs) in partnership with Local Authorities, and there is now national coverage of GWPS mapping. A Groundwater Protection Scheme provides guidelines for the planning and licensing authorities in carrying out their functions, and a framework to assist in decision-making on the location, nature and control of developments and activities in order to protect groundwater. **The Groundwater Protection Response overview and link to the main reports is here: https://www.gsi.ie/en-ie/programmes-and-projects/groundwater/projects/protecting-drinking-water/what-is-drinking-water-protection/county-groundwater-protection-schemes/Pages/default.aspx**

Geological Mapping
Geological Survey Ireland maintains online datasets of bedrock and subsoils geological mapping that are reliable and accessible. We would encourage you to use these data which can be found here, in your future assessments.

Please note we have recently launched QGIS compatible bedrock (100K) and Quaternary geology map data, with instructional manuals and videos. This makes our data more accessible to general public and external stakeholders. QGIS compatible data can be found in our downloadable bedrock 100k .zip file on the Data & Maps section of our website.

Geotechnical Database Resources
Geological Survey Ireland continues to populate and develop our national geotechnical database and viewer with site investigation data submitted voluntarily by industry. The current database holding is over 7500 reports with 134,000 boreholes; 31,000 of which are digitised which can be accessed through downloads from our Geotechnical Map Viewer. We would encourage the use of this database as part of any baseline geological assessment of the proposed development as it can provide invaluable baseline data for the region or vicinity of proposed development areas. This information may be beneficial and cost saving for any site-specific investigations that may be designed as part of the project.

Geohazards
Geohazards can cause widespread damage to landscapes, wildlife, human property and human life. In Ireland, landslides, flooding and coastal erosion are the most prevalent of these hazards. We recommend that geohazards be taken into consideration, especially when developing areas where these risks are prevalent, and we encourage the use of our data when doing so.

Geological Survey Ireland has information available on landslides in Ireland via the National Landslide Database and Landslide Susceptibility Map both of which are available for viewing on our dedicated Map Viewer. Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.

Geological Survey Ireland also engaged in a national project on Groundwater Flooding. The data from this project may be useful in relation to Flood Risk Assessment (FRA) and management plans, and is described in more detail under 'Groundwater' above.

Coastal Vulnerability while seen as a potential geohazard, is discussed in more detail under our marine and coastal unit information below.

Geothermal Energy
Geothermal energy harnesses the heat beneath the surface of the Earth for heating applications and electricity generation, and has proven to be secure, environmentally sustainable and cost effective over long time periods. Geothermal applications can range in depth from a few metres below the surface to several kilometres. Ireland has widespread shallow geothermal resources for small and medium-scale heating applications, which can be explored online through Geological Survey Ireland's Geothermal Suitability maps for both domestic and commercial use. We recommend use of our Geothermal Suitability maps to determine the most suitable type of ground source heat collector for use with heat pump technologies. Ireland also has recognised potential for deep geothermal resources.

The Roadmap for a Policy and Regulatory Framework for Geothermal Energy was launched at the Geoscience 2020 Conference in November 2020. The Assessment of Geothermal Resources for District heating in Ireland and the Roadmap for a Policy and Regulatory framework for Geothermal Energy in Ireland documents have been developed to support the Government's commitments under the Climate Action Plan 2019 and the Programme for Government.

For further information please see our Geoenergy pages on our website or contact the Groundwater and Geothermal Unit of the Geological Survey Ireland directly.

Natural Resources (Minerals/Aggregates)

Geological Survey Ireland is of the view that the sustainable development of our natural resources should be an integral part of all development plans from a national to regional to local level to ensure that the materials required for our society are available when required. Geological Survey Ireland highlights the consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process.

Geological Survey Ireland provides data, maps, interpretations and advice on matters related to minerals, their use and their development in our Minerals section of the website. The Active Quarries, Mineral Localities and the Aggregate Potential maps are available on our Map Viewer.

We would recommend use of the Aggregate Potential Mapping viewer to identify areas of High to Very High source aggregate potential within the area. In keeping with a sustainable approach we would recommend use of our data and mapping viewers to identify and ensure that natural resources used in developments are sustainably sourced from properly recognised and licensed facilities, and that consideration of future resource sterilization is considered.

Geochemistry of soils, surface waters and sediments

Geological Survey Ireland provides baseline geochemistry data for Ireland as part of the Tellus programme. Baseline geochemistry data can be used to assess the chemical status of soil and water at a regional scale and to support the assessment of existing or potential impacts of human activity on environmental chemical quality. Tellus is a national-scale mapping programme which provides multi-element data for shallow soil, stream sediment and stream water in Ireland. At present, mapping consists of the border, western and midland regions. Data is available at https://www.gsi.ie/en-ie/data-and-maps/Pages/Geochemistry.aspx. Geological Survey Ireland and partners are undertaking applied geochemistry projects to provide data for agriculture (Terra Soil), waste soil characterisation (Geochemically Appropriate Levels for Soil Recovery Facilities) and mineral exploration (Mineral Prospectivity Mapping).

Geophysical data

Geological Survey Ireland produces high-resolution geophysical data (Magnetic field, electrical conductivity, natural gamma-ray radiation) of soils & rocks as part of the Tellus programme. These data currently cover approximately 75% of the country and provide supporting geological information on a regional scale useful for assessing environmental impact and risk.

Historic Mines

The EPA, Geological Survey Ireland and the former Exploration & Mining Division undertook a joint project entitled "Historic Mine Site - Inventory and Risk Characterisation (HMS - IRC)". This project carried out detailed site investigations and characterisation on priority historic mine sites in the country.

A risk ranking methodology was developed which categorised the sites according to the risks posed to human and animal health and the environment. The project commenced in January 2006 and was completed in December 2008. A final report and a GIS geodatabase was produced on completion of the project. Reports and maps available here. The project provides an understanding of the impacts of historic mining sites in Ireland and their status at the time of the study.

Marine and Coastal Unit

Our marine environment is hugely important to our bio-economy, transport, tourism and recreational sectors. It is also an important indicator of the health of our planet. Geological Survey Ireland's Marine and Coastal Unit in partnership with the Marine Institute, jointly manages INFOMAR, Ireland's national marine mapping programme; providing key baseline data for Ireland's marine sector.

The programme delivers a wide range of benefits to multi-sectoral end-users across the national blue economy with an emphasis on enabling our stakeholders. Demonstrated applications for the use of INFOMAR's suite of mapping products include Shipping & Navigation, Fisheries Management, Aquaculture, Off-shore Renewable Energies, Marine Leisure & Tourism and Coastal Behaviour.

INFOMAR also produces a wide variety of seabed mapping products that enable public and stakeholders to visualize Ireland's seafloor environment https://www.infomar.ie/maps/downloadable-maps/maps. Story maps have also been developed providing a different perspective of some of the bays and harbors of the Irish coastline. We would therefore recommend use of our Marine and Coastal Unit datasets available on our website and Map Viewer.

The Marine and Coastal Unit also participate in coastal change projects such as CHERISH (Climate, Heritage and Environments of Reefs, Islands, and Headlands) and are undertaking mapping in areas such as coastal vulnerability and coastal erosion. Further information on these projects can be found here.

National Coastal Change Assessment

Geological Survey Ireland is undertaking a National Coastal Change Assessment. As part of this initiative two mapping products will be delivered for the entire Irish coastline: **coastal vulnerability mapping and shoreline change.**

Coastal vulnerability maps will provide an insight into the relative susceptibility of the Irish coast to adverse impacts of sea-level rise through the use of a **Coastal Vulnerability Index** (CVI). Currently the project is being carried out on the east coast and will be rolled out nationally over the next couple of years, detailed information and maps are available here. **Shoreline change rates** for the period 2000 to 2023 are being prioritised and will be released by county on a rolling basis over the next 12 months. Shoreline change rates database and reports will be accessible from GSI web mapping viewers. These suite of coastal mapping products are aimed at coastal managers to prioritise or concentrate efforts on adaptation.

Physiographic Units

Physiographic Units are cartographic representations of the broad-scale physical landscape of a region. They delineate physical regions showing internal uniformity with respect to one or more environmental attributes that can be clearly differentiated from neighbouring regions. They are valuable for regional land-use planning, and in studies of the influence of physical landscape on the ecological environment. This map is produced in support of the actions to be implemented in National Landscape Strategy for Ireland 2015 – 2025. Physiographic Units map data can be viewed online under the Physiographic Units tab on the online Map Viewer.

I hope that these comments are of assistance, and if we can be of any further help, please do not hesitate to the Geological Survey Ireland Planning Team at GSIPlanning@gsi.ie.

Yours sincerely,

Geoheritage and Planning Programme

Enc: Table - Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes.

An Roinn Comhshaoil, Aeráide agus Cumarsáide
Department of the Environment, Climate and Communications

Geological Survey Suirbhéireacht Gheolaíochta Ireland | Éireann

Geological Survey Ireland's Publicly Available Datasets Relevant to Planning, EIA and SEA processes

following European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018

(S.I. No. 296 of 2018)

Geological Survey Ireland Programme	Dataset	Relevant EIA Topic	Coverage	Description / Notes / Limitations	Link to Geological Survey Ireland map viewer
Geohazards	Landslide: National landslide database and landslide susceptibility map	Land & Soil/Climate/Landscape	National	Associated guidance documentation relating to the National Landslide Susceptibility Map is also available.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=b68cf1e4a9044a5981f950e9b9c5625c
Geohazards	Groundwater Flooding (Historic)	Water	Regional	Provide information of historic flooding, both surface water and groundwater. [A lack of flooding presented in any specific location of the map only indicates that a flood has not been detected. It does not indicate that a flood cannot occur in that location at present or in the future]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
Geohazards	Groundwater Flooding (Predictive)	Water	Regional	Provides information on the probability of future karst groundwater flooding (where available). [The maps do not, and are not intended to, constitute advice. Professional or specialist advice should be sought before taking, or refraining from, any action on the basis of the flood maps]	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=848f83c85799436b808652f9c735b1cc
Geohazards	Radon Map	Land & Soils/Air	National		http://www.epa.ie/radiation/radonmap/
Geoheritage	County Geological Sites as adopted by National Heritage Plan and listed in County Development Pla	Land & Soils/Landscape	Regional	All geological heritage sites identified by Geological Survey Ireland are categorised as CGS pending any further NHA designation by NPWS.	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=a30af518e87a4c0ab2fbde2aaac3c228
Geological Mapping	Bedrock geology:	Land & Soils	National	1:100,000 scale and associated memoirs.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Bedrock geology:	Land & Soils	Regional	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Sediments	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Quaternary geology: Geomorphology	Land & Soils	National	1:50,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=de7012a99d2748ea9106e7ee1b6ab8d5&scale=0
Geological Mapping	Physiographic units:	Land & Soils	National	Broad-scale physical landscape units mapped at 1:100,000 scale in order to be represented as a cartographic digital map at 1:250,000 scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=afa76a420fc54877843aca1bc075c62b
Geological Mapping	GeoUrban: Spatial geological data for the greater Dublin and Cork areas	Land & Soils	Regional	includes 3D models	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9768f4818b79416093b6b2212a850ce6&scale=0
Geological Mapping	Geotechnical database	Land & Soils	National	Digitised geotechnical and Site Investigation Reports and boreholes which can be accessed through online downloads	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=a2718be1873d47a585a3f0415b4a724c
Goldmine	Historical data sets including geological memoirs and 6" to 1 mile geological mapping records	land & Soils/Water	National	available online	https://secure.dccae.gov.ie/goldmine/index.html
Groundwater & Geothermal	Groundwater resources (aquifers)	Water	National	Data limited to 1:100,000 scale; sites should be investigated at local scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater recharge.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale; long term annual average recharge	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater vulnerability.	Water	National	Data limited to 1:40,000 scale; sites should be investigated at local scale	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Group scheme and public supply source protection areas.	Water	National	Not all PWS / GWS have SPZ / ZOC. Check with IW / coco / NFGWS for private supplies.	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater Protection Schemes	Water	National	Data is limited to scale of 1:40,000. Data does not include all of the source protections areas	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Catchment and WFD management units.	Water	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	karst specific data layers	water	National	For areas underlain by limestone, includes karst features, tracer test database; turlough water levels (gwlevel.ie).	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Wells and Springs	Water	National	Not comprehensive, there may be unrecorded wells and springs	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=7e8a202301594687ab14629a10b748ef
Groundwater & Geothermal	Groundwater body Descriptions	Water	National	Not exhaustive; only those in designated SACs; could be other GWDTEs; for more information contact NPWS / EPA / site investigations	https://www.gsi.ie/en-ie/programmes-and-projects/groundwater-and-geothermal-unit/activities/understanding-ireland-groundwater/Pages/Groundwater-bodies.aspx
Groundwater & Geothermal	Geothermal Suitability maps	land & Soils/Water	National	Also, Roadmap for a Policy and Regulatory Framework for Geothermal Energy, November 2020	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=9ee46bee08de41278b90a991d60c0b9e
Marine & Coastal Unit	INFOMAR - Ireland's national marine mapping programme; providing key baseline data for Ireland's	Water	National		https://secure.dccae.gov.ie/GSI/INFOMAR_VIEWER/
Marine & Coastal Unit	CHERISH - Coastal change project (Climate, Heritage and Environments of Reefs, Islands, and Headla	Water	Regional		http://www.cherishproject.eu/en/
Marine & Coastal Unit	Coastal Vulnerability Index (CVI).	water /Land & Soils	Regional	Currently the project is being carried out on the east coast and will be rolled out nationally	https://www.gsi.ie/en-ie/programmes-and-projects/marine-and-coastal-unit/projects/Pages/Coastal-Vulnerability-Index.aspx
Minerals	Aggregate potential	Land & Soils/Material Assets	National	Consideration of mineral resources and potential resources as a material asset which should be explicitly recognised within the environmental assessment process	https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
Minerals	Active quarries	Land & Soils	National		https://dcenr.maps.arcgis.com/apps/webappviewer/index.html?id=ee8c4c285a49413aa6f1344416dc9956
Minerals	Historic mines	Land & Soils/Cultural Heritage	National	Inventory and Risk Classification 2009. Environmental Protection Agency, Economic Minerals Division and Geological Survey Ireland (DECC).	https://gis.epa.ie/EPAMaps/default?easting=?&northing=?&lid=EPA:LEMA_Facilties_Extractive_Facilities https://www.epa.ie/enforcement/mines/
Tellus	Geochemical data: multi-element data for shallow soil, stream sediment and stream water	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
Tellus	Airborne geophysical data including radiometrics, electromagnetics and magnetics	Land & Soils	Regional	A national mapping programme	https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754
Tellus	urban geochemistry mapping (Dublin SURGE project),	Land & Soils	Regional		https://dcenr.maps.arcgis.com/apps/MapSeries/index.html?appid=6304e122b733498b99642707ff72f754

Notes:

1. The maps and data listed above are available on the Geological Survey Ireland map viewer https://www.gsi.ie/en-ie/data-and-maps/Pages/default.aspx

2. Please read all disclaimers carefully when using Geological Survey Ireland data

3. Geological Survey Ireland and Irish Concrete Federation published guidelines for the treatment of geological heritage in the extractive industry in 2008.

FEHILY TIMONEY

CONSULTANTS IN ENGINEERING,
ENVIRONMENTAL SCIENCE
& PLANNING

APPENDIX 3

Detailed Evaluation of the Environmental Effects of Plan Implementation

Appendix 3.1 - Approach and Methodology for the Detailed Evaluation of Environmental Effects of Plan Implementation

A detailed evaluation of the potential effects of the Preferred LACAP on the baseline environment has been carried out in accordance with best practice guidelines. An evaluation matrix template has been developed to facilitate the evaluation of the Preferred LACAP on Strategic Environmental Objectives (SEOs) relevant to each Environmental Component.

A dedicated evaluation matrix has been prepared for each Theme Area in the Draft LACAP. Draft LACAP Actions associated with that Theme Area are listed on one axis of this matrix. The corresponding potential environmental effects of the actions are then described. An evaluation of the environmental effects of Draft LACAP Actions on Environmental Components, having regard to the SEOs relevant to each Environment Component, was then carried out for each Theme Area of the Draft LACAP in accordance with the requirements of the SEA Directive and best practice guidelines. Potential effects of the Draft LACAP on Environmental Components/SEOs have been categorised as follows:

- Potential Positive Environmental Impact (indicated in the matrix by a '+').[72]
- Potential Negative Environmental Impact (indicated in the matrix by a '-').[73]
- Potential Positive and Negative Environmental Impacts (indicated in the matrix by a '+/-').
- Uncertain Environmental Impact ((indicated in the matrix by a '?').
- Neutral, No or Insignificant Environmental Impact (indicated in the matrix by a '0').

The evaluation considers all potential direct, indirect/secondary, cumulative[74], synergistic[75], short, medium and long-term, permanent and temporary, positive and negative environmental effects.

Detail on the SEOs associated with Environmental Components which the environmental effects of the Draft LACAP have been measured against is provided in Table 1 overleaf.

Completed Evaluation Matrices for each Draft LACAP Theme Area are presented in Appendix 3.2.

[72] Potential Positive Environmental Impacts are defined as having the potential to support the achievement of an SEO.
[73] Potential Negative Environmental Impacts are defined as having the potential to hinder the achievement of an SEO.
[74] The addition of many minor or insignificant effects, including effects of other projects, to create larger, more significant effects.
[75] The addition of effects to create a total effect greater than the sum of the individual effects so that the nature of the final impact is different to the nature of the individual impact.

Table 1 - Strategic Environmental Objectives against which the environmental effects of the Draft LACAP have been measured

Environmental Component	SEO Code	Strategic Environmental Objective
Overall	O1	Ensure, where appropriate, that lower-level plans and projects contribute to overall environmental monitoring processes within the County.
Population & Human Health	PHH1	Avoid or, minimise impacts to population and human health.
	PHH2	Ensure the Decarbonising Zone avoids and minimises impacts to the existing economic activities within the area and does not compromise/conflict with existing land use objectives.
Biodiversity, Flora & Fauna	B1	Ensure Climate Action does not conflict with biodiversity protection, restoration and rehabilitation.
	B2	Ensure compliance with Habitats and Birds Directives with regard to protection of European Sites and Annexed habitats and species.[76]
	B3	Support Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species.
	B4	To avoid or minimise significant impacts on semi-natural habitats, species, environmental features or other sustaining resources in designated national sites and to comply with the Wildlife Acts 1976-2012 with regard to listed species.
	B5	Go beyond biodiversity protection to deliver biodiversity enhancement, wherever possible, in response to the biodiversity emergency.
Landscape, Seascape & Visual Amenity	L1	Avoid or minimise impacts on statutory landscape designations defined in the CDP.
	L2	Avoid or minimise adverse visual effects on residential receptors or other sensitive visual receptors.
Cultural Heritage - Archaeology & Architectural	CH1	Avoid impacts upon archaeological heritage (including entries to the Record of Monuments and Places (RMP)) and architectural heritage (including entries to the Record of Protected Structures (RPS) and National Inventory of Architectural Heritage (NIAHs)).
Soils	S1	Avoid or minimise effects on mineral resources or soils.
Land Use	LU1	Avoid or minimise effects on existing land use.
Air Quality and Noise	AQN1	Increase the number of people travelling to work or school via public transport or by non-mechanical means.
	AQN2	Avoid or minimise effects on local air quality.

[76] 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

Environmental Component	SEO Code	Strategic Environmental Objective
	AQN3	Avoid or minimise adverse noise impacts.
Water	W1	Maintain and/or improve, the quality and status of surface waters.
	W2	Maintain and/or improve, the chemical and quantitative status of groundwaters.
	W3	Prevent impact upon the WFD status of surface waters and groundwater in line with the requirements of the WFD.
	W4	Comply as appropriate with the provisions of the Flood Risk Management Guidelines.
	W5	Prevent impact upon drinking water quality.
Material Assets	MAI1	Avoid or minimise effects on built/amenity assets and infrastructure.
	MAI2	Avoid or minimise effects on effects upon existing and (where known) planned infrastructure.
	MAI3	Promote sustainable transportation.
	MAI4	Promote sustainable waste management.
	MAI5	Promote sustainable water use and drainage management.
Tourism & Recreation	TR1	Avoid or minimise effects upon tourism and recreation amenities.
Climate Change	CF1	Delivery of the necessary action to support the national target of 80% electricity from renewable sources by 2030.
	CF2	Actively support the delivery of all national climate policy as appropriate to the county with the prioritisation and acceleration of evidence-based measures.
	CF3	CF3: Assist in the delivery of the climate neutrality objective at local and community levels.
	CF4	Deliver a Decarbonising Zone (DZ) within the local authority area to act as a test bed for a range of climate mitigation and adaptation measures in a specifically defined area through the identification of projects and outcomes that will assist in the delivery of the National Climate Objective.
Inter-relationships	IR1	Maintain and improve the health of people, ecosystems and natural processes Actively seek to integrate opportunities for environmental enhancement during adaptation to climate change

Appendix 3.2 - Evaluation Matrix - Detailed Evaluation of Environmental Effects of Plan Implementation

Community

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.1.1	Support communities to co-create a vison for climate action by working with existing community models/mechanisms (e.g the SEAI Sustainable Energy Communities) and also supporting new models, where appropriate.	The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.1.2	Trial the EU funded HYBES project 'living lab' in the decarbonisation zone.	This action has the potential to support a decrease in GHG emissions within the LA. This action may support renewable energy development or building upgrade works, which could generate potential negative construction or operational effects, including effects on biodiversity, local air quality effects and noise effects, and on the conservation status of protected structures.	-	-	-	-	0	0	-	0	0	0	+
4.4.1.2.1	Create awareness about, and promote understanding of, climate change in Cork County through communications and education. Communications strategies will be tailored to particular audiences and may include: campaigns, talks, debates, online information, guidance documents, webinars, podcasts, video, radio and information disseminated through the Cork County libraries network (with 26 branches).	This promotional/educational related action will underpin and support the effective delivery of climate action in the community by promoting awareness and understanding of climate action related issues in Cork County. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.2	Develop links with young citizens (e.g the Comhairle Na Nóg) to give voice to their concerns about climate change and to enhance their awareness and the actions that they can take.	This communication/educational related action will underpin and support the effective delivery of climate action in the community by promoting awareness of climate action related issues in young citizens. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.2.3	Engage older people in climate action by working with the Age Friendly networks and the Older People's Council to ensure that awareness of climate action is raised and to promote and enhance the actions that they can take as a response to climate change.	This educational related action will underpin and support the effective delivery of climate action in the community by promoting awareness of climate action related actions older people can take. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.4	Promote public engagement with climate action through arts linking in with the climate change pillar of Creative Ireland.	This promotional action will support the effective delivery of climate action in the community. The adoption of this action will support the full realization of the plan vision generally.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.5	Liaise with other agencies to develop and promote Climate Community Leadership that will: · Build knowledge, confidence and capacity of community members to initiate climate action in their neighbourhoods · Build capacity of community leaders/change agents to "talk climate" in their networks · Identify and acknowledge existing community climate action 'champions/heroes' and acknowledge and amplify their campaigns.	This engagement/promotional action will support the effective delivery of climate action in the local authority as an organization and in the community. The adoption of this action will support the full realization of the plan vision generally.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.6	Build on Cork County Council's awareness month "Make One Change: Cork County Cuts Carbon" (initiated by the Council in 2022)	The promotional/engagement action will serve to promote climate action in the community. It may lead to decreased GHG emissions and lowered energy consumption within the community. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.2.7	Continue to promote schools' programmes such as Green Flags, School Gardens, Climate Literacy.	This action will support the promotion of good environmental management at schools and has the potential to generate some degree of positive effects on biodiversity and climate.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.8	Develop partnerships with external agencies and community organisations to enable climate action projects at community level.	The action will serve to promote climate action in the community. It may lead to decreased GHG emissions and lowered energy consumption within the community. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.2.9	Support and work with LAWPRO to encourage a community response to enable water conservation in the community, in association with local community groups.	This action will promote the conservation of water in the community and may have a slight positive effect on material assets - through the reduction of water supply system demand. The effective reduction of water demand has the potential to marginally reduce the levels of lifecycle GHG emissions associated with water treatment and distribution.	0	0	0	0	0	0	0	0	+	0	+
4.4.1.3.1	Local Climate Action projects will be funded through the new Community Climate Action Programme (CCAP). The CCAP will operate under the following themes. • Home/Energy • Travel • Food and Waste • Shopping and Recycling • Local Climate and Environmental Action. The fund allocated to Cork County is €1.2 million over a three year period. There will be €600,000 for the first 18 months and €600,000 in the following 18 month period.	This action may support renewable energy development or building upgrades, which could generate a range of slight to significant of environmental effects, including visual impacts, construction related noise or dust impacts, impacts on biodiversity, or impacts on sensitive human receptors. Energy retrofit related works may affected the conservation status of protected structures	-	-	-	-	0	0	-	0	0	0	+
4.4.1.3.2	Ensure that climate change is a consideration in other community grants administered by the Council.	The financial action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.4.1	Research and collate data on community-based climate action in the County and map same with descriptions. Set up an easily accessible method for the public to access same. Disseminate information to Cork County communities to promote local action.	This is a research related action and will have no real environmental effect when considered in isolation. The action will support climate action within the community.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.4.2	Capture insights from engagement activities to provide an evidence base to inform the implementation of the Climate Action Plan.	This is a research related action and will have no real environmental effect when considered in isolation. The action will support climate action based objectives of the plan.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.4.3	Research and learn from best practice in Ireland and internationally.	This is a research related action and will have no real environmental effect when considered in isolation. The action will support climate action generally.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.5.1	Work with stakeholders to understand key risks and drivers for a just transition in Cork that will provide insights and recommendations to understand and navigate the climate transition in a way that is fair and equitable. Support and assist stakeholder action to help those who are most vulnerable to change. This action will ensure that Cork County Council are active in enabling a 'just transition' and protecting the health and wellbeing of communities across Cork County.	This is an engagement related action and will have no real environmental effect when considered in isolation. The action will support climate action based objectives of the plan.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.6.1	Work with communities to ensure that community Rest Centres are prepared in the event of people being displaced e.g. by flood.	This action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.4.1.6.2	Develop a template for community emergency plans to assist communities to prepare their own location specific emergency community plans.	This action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.7.1	Work with agencies, organisations and community groups to assess the barriers and obstacles to climate action by certain sectors of society and to develop new approaches to address these e.g methods to assist with housing upgrades for the elderly or vulnerable.	This is an engagement related action and will have no real environmental effect when considered in isolation. The action will support climate action based objectives of the plan.	0	0	0	0	0	0	0	0	0	0	+
4.4.1.8.1	Participate in and support activities of the Transport and Mobility Forum.	This action will support an increase in accessibility within the public transport sector and encourage the use of public transport/active travel, for community members of the local authority functional area.	0	0	0	0	0	0	0	0	+	0	+
4.4.1.8.2	Continue the implementation of 'safe routes to school' and neighbourhood greenways to further enhance localised active-travel infrastructure.	This action has the potential to encourage modal shift and the use of active travel networks. This action supports the development of additional active travel infrastructure. In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.	-	-	**0**	-	**0**	**0**	-	-	**+**	**0**	**+**
4.4.1.8.3	Continue promotion and support for the Active Travel Green Flags.	This promotional action will have no real effect in isolation. The action supports a potential modal shift and the use of active travel networks. This action supports the development of additional active travel infrastructure.	-	-	**0**	-	**0**	**0**	-	-	**+**	**0**	**+**

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to have generate some degree of positive environmental effect due to a reduction in vehicle use.											
4.4.1.8.4	Support active travel promotional events of stakeholders e.g. Mix Your Mode, Bike Week etc.	This promotional action will have no real effect in isolation. The action supports a potential modal shift and the use of active travel networks. This action supports the development of additional active travel infrastructure.	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**+**	**0**	**+**
4.4.1.8.5	Continue to encourage the development of bottom-up sustainable transport initiatives and engage with communities on new initiatives, where appropriate.	This promotional/engagement action will have no real effect in isolation. The action supports a potential modal shift and the use of active travel networks. This action supports the development of additional active travel infrastructure. In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to have generate some degree of positive environmental effect due to a reduction in vehicle use.	**-**	**-**	**0**	**-**	**0**	**0**	**-**	**-**	**+**	**0**	**+**

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.4.1.9.1	Promote and support community growing projects, allotments and community gardens, where suitable land is available, as a way that communities can grow their own food, lower food miles and food waste.	This action has the potential to have wide ranging slight to moderate positive effects on local biodiversity. There is the potential for this action to support the reduction of household waste and transport emissions. Promoting greenspace vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	0	0	0	0	0	0	0	0	+	0	+
4.4.1.9.2	Promote the circular economy to communities including waste reduction, re-use and upcycling.	This action will support the effective delivery of circular economy related action in the community and is likely to promote effective waste management and waster/material circularity. Any measures that improve resource efficiency/circularity will broadly support the reduction of lifecycle GHG emissions associated with the production of materials and goods. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	0	0	+	0	+
4.4.1.9.3	Encourage communities to buy local (to reduce food miles and to support the local economy) and work with stakeholders and communities to reduce food waste	This action is promotional in nature and will have no real effect when considered in isolation. This action has the potential to support the reduction of lifecycle GHG emissions associated with food sourced from afar.	0	0	0	0	0	0	0	0	+	0	+
4.4.1.9.4	Initiate a 'think before you buy' campaign to encourage people to buy only what they need promoting conscious consumption.	This promotional action will have no real environmental effect when considered in isolation. The action will support conscious consumerism. Any measures that reduce resource consumption will broadly support the reduction of lifecycle GHG emissions associated with the production of materials and goods. This is likely to result in a positive environmental effect generally.	0	0	0	0	0	0	0	0	+	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L – Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.

Direct Emissions

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.3.1.1.1	Assess demand sources, e.g buildings, equipment, etc to identify opportunities to eliminate demands	This will action promote organizational energy efficiency within the local authority organization. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	+	0	0	0	0
4.3.1.1.2	Upgrade lighting to LED where financially viable	This action will support the local authority in reducing its organizational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect in terms of GHG emissions however, the spectrum of light from LED sources has the potential to impact nocturnal species. Therefore there is also scope for there to be slight negative effects if unmitigated.	0	-	0	0	0	0	+	0	0	0	+
4.3.1.1.3	Investigate opportunities for renewable energy sources to identify projects for annual implementation programme	This action is research based and will have no real environmental effect when considered in isolation. This action will support the local authority reducing its organisational GHG emissions in line with climate policy and legislation and emission reduction targets. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action may support the development of on-site renewable energy infrastructure at local authority sites. The development of PV panels on Council buildings has the potential to result in negative glint and glare impacts on sensitive environmental receptors.	-	0	0	0	0	0	+	0	0	0	+
4.3.1.1.4	Replace equipment with more efficient alternatives when available and financially viable	This action will likely promote a reduction electricity usage within the local authority - which has the potential to generate some degree of positive effects on climate. Improper management of WEEE associated with this action may lead to unintended negative environmental effects.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.3.1.1.5	Continue to monitor developments in technology and equipment which reduce electricity consumption to identify projects for annual implementation programme	This is a research based action which will have no real environmental effect when considered in isolation. This action will support the local authority reducing its electricity consumption and therefore also reduce organisational GHG emissions in line with climate policy and legislation and emission reduction targets.	0	0	0	0	0	0	0	0	0	0	0
4.3.1.1.6	Collect data from all contracts to report contracted carbon	This is an administrative action which will have no real environmental impacts when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.3.1.2.1	Assess demand sources to identify opportunities to eliminate demands	This will action promote organizational energy efficiency within the local authority organization. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+
4.3.1.2.2	Assess opportunities to replace oil/gas burners usage with renewable alternatives to identify projects for annual implementation programme	This assessment based action will have no real environmental effect when considered in isolation. This action will likely promote a reduction oil/gas usage within the LA - which has the potential to generate some degree of positive effects on climate. effects. This action may support the development of on-site renewable energy systems at local authority sites, which could lead to unintended environmental effects. The development of PV panels on Council buildings has the potential to result in negative glint and glare impacts on sensitive environmental receptors.	0	0	-	0	0	0	0	0	0	0	+
4.3.1.2.3	Assess opportunities to upgrade building insulation to identify projects for annual implementation programme	This assessment based action will have no real environmental effect when considered in isolation. Upgrade or retrofitting works associated with this action may result in the generation of localized environmental effects, including dust and noise impacts, or may impact on the conservation status of protected structures undergoing upgrade.	-	-	0	-	0	0	0	0	0	0	+
4.3.1.2.4	Assess opportunities to upgrade building air tightness to identify projects for annual implementation programme	This assessment based action will have no real environmental effect when considered in isolation. Upgrading or retrofitting works associated with this action may result in the generation of localized environmental effects, including dust and noise impacts. Such upgrades may also affect the conservation status of protected structures or features.	-	-	0	-	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.3.1.2.5	Continue to monitor and utilise developments in technology and equipment which reduce reduce/replace fossil fuels consumption to identify projects for annual implementation programme	This is a monitoring based action which will have no real environmental effect when considered in isolation. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	0
4.3.1.2.6	Collect contracted carbon data from all contracts	This is an administrative action which will have no real environmental impacts when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.3.1.3.1	Assess demand sources to identify opportunities to eliminate demands	This will action promote organizational energy efficiency within the local authority organization. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+
4.3.1.3.2	Assess opportunities to replace vehicles with EV where alternatives available and financially viable consumption to identify projects for annual implementation programme	This assessment based action will have no real environmental effect when considered in isolation. This action has the potential to support the reduction of vehicle related emissions in the County. Improper management of WEEE associated with this action may lead to unintended negative environmental effects.	0	0	0	0	0	0	0	0	-	0	+
4.3.1.3.3	Assess opportunities to utilise low emission fuels where available and financially viable to identify opportunities consumption to identify projects for annual implementation programme	This assessment based action will have no real environmental effect when considered in isolation. Increasing the level of local authority vehicles that use sustainable sources of fuel will have a slight positive effect on climate. The use of unsustainable fuel in vehicles may generate negative lifecycle impacts, including land use change related impacts.	0	0	0	0	0	-	0	0	0	0	+
4.3.1.3.4	Continue to monitor and utilise developments in technology and equipment which reduce fossil fuel consumption to identify projects for annual implementation programme	This is a monitoring based action which will have no real environmental effect when considered in isolation. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+
4.3.1.3.5	Collect contracted carbon data from all contracts	This is an administrative action which will have no real environmental impacts when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.3.1.4.1	Monitor electric grid developments in relation to carbon reduction to calculate contribution	This is a monitoring based action which will have no real environmental effect when considered in isolation. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.3.1.4.2	Replace equipment with more efficient when available and financially viable	This action will likely promote a reduction electricity usage within the local authority- which has the potential to generate some degree of positive effects on climate. Improper management of WEEE associated with this action may lead to unintended negative environmental effects.	0	0	0	0	0	0	0	0	-	0	+
4.3.1.4.3	Continue to monitor developments in technology and equipment which increases energy efficiency	This is a research based action which will have no real environmental effect when considered in isolation. This action will support the local authority increasing its energy efficiency and therefore also reduce organisational GHG emissions in line with climate policy and legislation and emission reduction targets.	0	0	0	0	0	0	0	0	0	0	0

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Governance

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.1.1	All Council plans shall align with the Climate Action Plan vision and mission.	This is an administrative action which will support plan delivery generally.	0	0	0	0	0	0	0	0	0	0	0
4.2.1.2.1	The existing internal structure for the development of this plan will remain in place initially and will be adapted throughout the lifetime of the plan to respond to new challenges as they occur. This structure will nurture inter-departmental co-operation to deliver this plan. This structure is as follows: 1. A high-level senior management Steering Group, chaired by the Chief Executive, the purpose of which is to set the overall targets for the delivery of the Climate Action Plan, including budgets and resources. This group meets 1-2 times per annum. 2. An Operational Group which is chaired by the Divisional Manager with responsibility for the Environment Directorate. This is also a senior management group and it reports to the Steering Group. The purpose of this group is to ensure that the individual and specific actions included in the Climate Action Plan are undertaken by the directorates. This group meets 2-4 times per annum. 3. An Implementation Group, which will include a representative from all directorates and functions, which is made up of middle management who review the day-to-day logistics and implementation of individual actions. This group will be chaired by the Climate Action Co-ordinator and will meet as required and at a minimum of once a quarter.	The action will serve to promote organisational climate action and the development of climate-positive policies. It may lead to decreased GHG emissions and lowered energy consumption within the LA. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.2.2	Support the Climate Co-Ordinator team in the monitoring and reporting of the Council's Climate Action Plan.	This is a monitoring/reporting based action which will have no real environmental effect when considered in isolation. The action supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.2.3	Ensure that actions from this Climate Action Plan are incorporated into all Council plans, strategies and policies including departmental work plans, team plans and staff meeting agendas.	The action will serve to promote organisational climate action and the development of climate-positive policies. It may lead to decreased GHG emissions and lowered energy consumption within the LA. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.2.4	Incorporate Climate Action Plan into existing stakeholder engagement groups, networks, forums and platforms.	The action will serve to promote organisational climate action and the development of climate-positive policies. It may lead to decreased GHG emissions and lowered energy consumption within the LA. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.2.5	Communication and collaboration with the CARO office will be continued and strengthened.	The action will have no real environmental effects when considered in isolation but will support the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.2.6	A communications plan will be developed and implemented to report climate action progress and promote climate action in a coordinated manner across council communications processes and platforms.	The promotional action will serve to promote organisational climate action and the development of climate-positive policies. It may lead to decreased GHG emissions and lowered energy consumption within the LA. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.2.7	With the support of CARO, the Council will monitor European and national policy developments and incorporate as appropriate.	This action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.3.1	To deliver this five-year plan, an annual implementation programme will be prepared. This programme will be dependent on the availability of external funding (e.g. national, European, SEAI, etc.) and internal funding and resources.	The action supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.3.2	Support and administer the Community Climate Action Programme (CCAP) funded by national Government, which will allow communities to apply for grants to enable climate projects at a local level.	The financial action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action and the development of climate-positive policies. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.3.3	Continue with the provision of existing grants for communities and make climate action a central component to these grants.	The financial action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action and the development of climate-positive policies. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.3.4	Participate in and maximise the benefits of EU-funded environmental and climate-related European Projects such as the HYBES project.	The financial action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action and the development of climate-positive policies. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.4.1	Increase climate action awareness and engagement among staff and promote positive behavioural change. Specifically, promote awareness and understanding of the role and implications of this Climate Action Plan and build capacity of public-facing council employees to “talk climate”.	This training relation action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.4.2	Support the up-skilling and re-skilling of staff to enable the implementation of climate action in their roles.	This training relation action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.4.3	Work with CARO to ensure ongoing climate action training for staff.	This training relation action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.4.4	Strengthen feedback systems with staff, for improved communication and ideas generation.	The administrative related action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action and the development of climate-positive policies. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.4.5	Review remote working arrangements at suitable intervals to ensure optimum use of space is achieved, for example through desk sharing and a reduction in offices.	This action will likely promote a reduction in transport emissions associated with home to work commuting using ICE based vehicles - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.5.1	Continue to implement the national Green Public Procurement strategy to ensure that Green Procurement is mainstreamed through all sections of Cork County Council. Ensure that procurement of all works/services follows the Department of Public Expenditure and Reform circular 20/2019.	The effective promotion and expanded adoption of green public procurement processes has the potential to increase the frequency at which the local authority sources goods and service that have a reduced environmental impact. The successful and effective promotion of green public procurement has the potential to generate some degree of positive environmental effects generally, including positive effects on the climate environment and other environmental co-benefits.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.5.2	Ensure that greenhouse gas emissions are factored into financial decisions.	This financial action will have no real effect when considered in isolation. It has the potential to support a decrease in GHG emissions within the LA. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.5.3	Cork County Council's Finance Department, will facilitate monitoring and reporting of climate activity expenditure.	This financial/monitoring action will have no real effect when considered in isolation. The results of such monitoring have the potential to support a decrease in GHG emissions within the LA.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.6.1	All existing assets owned by Cork County Council to be reviewed to assess if they can be reduced or re-organised in order to save carbon emissions.	This assessment based action will have no real environmental impact when considered in isolation. The results of this assessment will likely support a decrease in GHG emissions within the LA.	0	0	0	0	0	0	0	0	-	0	+
4.2.1.6.2	Any additional or replacement of existing assets needs to take into account the 2030 and 2050 carbon reduction targets.	This action will serve to promote organisational climate action and the development/adaption of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.7.1	Undertake stakeholder mapping for broadened engagement and for collaborating effectively on climate action across Cork County. Assess the role of strategic partners to deliver on certain projects.	This engagement related action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.7.2	Collaborate and work with other sectors and agencies to deliver programmes that support climate action, build and mobilise community capacity.	This action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.7.3	Use the Decarbonisation Zone in Macroom to engage stakeholders in innovative actions, using pilot projects designed to reduce emissions.	This engagement related action will serve to promote organisational climate action and the development/adaption of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.7.4	Establish an open-source GIS tool to map community climate action across the County, including: description of project, location and progress to inform the Council and its' stakeholders on projects in the County and clusters, gaps, linkages.	This action will serve to promote organisational climate action and the development/adaption of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.8.1	Establish a reporting and monitoring system to track the progress of climate actions and report locally and nationally.	This training related action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.8.2	Continue Cork County Council's regular liaison with the Climate Action Regional Office (CARO) Atlantic Seaboard South and provide appropriate progress reports.	This action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.2.1.9.1	Implement an engagement programme to inform councillors on climate and environmental action in order to build knowledge, confidence and capacity to 'talk climate' at a local and a policy level.	This training related action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+
4.2.1.9.2	Support the training programme for councillors run by the Climate Action Regional Offices.	This training related action will serve to promote organisational climate action and the development of climate-positive policies. The action supports the full realisation of the vision and objectives of the plan within the local authority.	0	0	0	0	0	0	0	0	0	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.

Biodiversity, The Natural Environment, Heritage & Land Use, Land Use Change And Forestry (LULUCF)

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.1.1.1	Continue to implement the County Biodiversity Action Plan.	The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.	0	0	0	0	0	0	0	0	0	0	0
4.5.1.1.2	Work with stakeholders and communities to identify suitable areas for Neighbourhood Plans for Nature Recovery.	This action is research based and will have no real effect on the environment when considered in isolation. The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.1.3	Continue to expand delivery of Pollinator Plans throughout towns in the county.	This action has the potential to have wide ranging slight to significant positive effects on local biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.1.4	Work and support the Heritage Council's Biodiversity programme to take an inclusive, community-centric approach to biodiversity action and promote community responsibility for conservation.	This action has the potential to have wide ranging slight to significant positive effects on local biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.1.5	Work with stakeholders to promote engagement and awareness of National Biodiversity Data Centre best practices and recommended actions for citizens, developers, businesses and vendors.	The financial action will have no real environmental effect when considered in isolation but will serve to promote organisational climate action. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	+	0	0	0	0	0	0	0	0	+
4.5.1.1.6	Promote citizen science initiatives including targeting key sensitive species and empower communities to support local habitat restoration and protection.	This action has the potential to generate some degree of positive effects on biodiversity and climate.	0	+	0	0	0	0	0	0	0	0	+
4.5.1.2.1	Work with stakeholders to create a Climate Risk Register of all natural heritage assets at a habitat level.	This is a research/administrative based action that will have no real effect on the environment when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.1.2.2	Work with stakeholders in identifying wetlands, and support rewetting and restoration programmes.	This action will provide important baseline data for the protection and enhancement of current wetlands within the County. The rewetting and restoration of wetlands can have positive effects on biodiversity and water quality and can lead to increased GHG sequestration. In the absence of proper design, wetland rewetting works and restoration could potentially impact or impinge on important habitat or species present at wetlands, resulting in slight to significant environmental impacts. Such works could potentially impact on water quality and hydrology also.	0	+/-	0	0	0	0	0	+/-	0	0	+
4.5.1.2.3	Work with stakeholders to support the establishment of Marine Protected Areas.	This action has the potential to generate positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.2.4	Work with stakeholders protect and enhance biodiversity of Cork Harbour.	This action has the potential to generate some degree of positive effects on biodiversity in Cork Harbour.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.2.5	Work with stakeholders to examine the feasibility of mapping of green and blue infrastructure assets in the County.	This action will have no real environmental effect when considered in isolation. This action will support mapping which may provide important baseline data for the improvement and enhancement of green and blue infrastructure in the County.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.2.6	Identify opportunities to preserve, enhance and develop ecological connections between areas of high biodiversity value, via green infrastructure networks, wildlife corridors, etc.	This action will have wide ranging slight to very significant positive effects on biodiversity, and slight to significant positive effects on water quality and hydrology. In the absence of any mitigation, works involved in the construction of green infrastructure, wildlife corridors etc. have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	+/-	0	-	0	0	-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.1.3.1	Promote biodiversity net gain in all new public and private developments: Require the submission of a green infrastructure statement for all development. Continue to integrate ecological expertise within the development management process including at pre-planning and planning application stages.	This action will have wide ranging slight to significant positive effects on biodiversity, and climate. In the absence of any mitigation, works involved in the enhancement of existing or the construction of new green infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	+/-	0	-	0	0	-	-	+	0	+
4.5.1.3.2	Continue to integrate ecological expertise and biodiversity protections through placemaking measures in the development and management of public projects including housing, transport infrastructure and public realm projects etc.	This action will support biodiversity generally during the development and management of public projects. This is likely to result in a positive environmental effect generally. In the absence of any mitigation, works involved in the integration of biodiversity protection measures in the development of public projects have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	+/-	0	-	0	0	-	-	+	0	+
4.5.1.3.3	Retention and protection of existing biodiversity shall be a key consideration in all works or developments.	This action has the potential to generate positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.3.4	Review and improve existing priority-based enforcement operations, procedures, and systems to better assess and advance enforcement files which have a potentially significant environmental and biodiversity impact.	This action has the potential to generate positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.1.4.1	Develop and integrate Biodiversity Best Practice Guidelines into the work practices of the authority and identifying staff training needs required for delivery.	The action will serve to promote organisational protection/enhancement of biodiversity. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan within the local authority.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.4.2	Undertake review of existing council-owned housing estates to supports residents in identifying areas suitable for retrofitting of biodiversity protective measures in accordance with best practice (e.g. tree planting, wildflower meadows, pollinator zones etc.).	This action has potential to support biodiversity protective measures. The action will generate a positive effect for biodiversity, flora and fauna. The planting of non native/ invasive trees may negatively impact biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.4.3	Identify a range of potential pilots to demonstrate sustainable measures including nature-based SuDS; and pilot a biodiversity- and climate-led design for Council-led social housing developments with measures such as green roofs, green walls, wetland & pond SUDS, green carparking, nest boxes in facades, grasslands, and wildlife friendly shrubs and trees in open space.	This action has potential to support a variety of nature-based related development, including sustainable urban drainage systems. The action will generate a positive effects for biodiversity and for environmental receptors that are at risk of being negatively impacted by flood events - by reducing the risk of such flood events and promoting sustainable solutions for the same. The action has the potential to positively impact biodiversity, flora and fauna. In the absence of any mitigation, works involved in the implementation/construction of such development have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	+/-	0	-	0	0	-	+/-	+	0	+
4.5.1.4.4	Identify council-held assets for opportunities where biodiversity measures, e.g. wildflower/hay meadows, rewilding, hedgerows, and habitat integration methods (e.g. bat boxes, swift boxes / nest boxes) can be implemented in accordance with best practice guidelines, in partnership with	This action (identifying opportunities) will have no real environmental impact when considered in isolation. This action has the potential to support positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	appropriate bodies e.g. Birdwatch Ireland.												
4.5.1.4.5	Identify opportunities for tree planting and woodland creation within authority's landbank - and aim to avail of the Creation of Woodland in Public Lands Scheme and other grant aided schemes to extend native woodland cover in the county.	This action has the potential to have wide ranging slight to moderate significant effects on local biodiversity, and slight to significant effects on landscape character and visual amenity. Promoting vegetative growth may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions.	0	+	0	0	0	0	0	0	0	0	+
4.5.1.4.6	Continue to promote actions taken to enhance ecological integrity taken in council-held assets and lands, to lead by example.	This promotional action will support positive effects on biodiversity.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.5.1	Develop an Invasive Alien Species Policy for the county and examine benefits of preparing response plans to specific invasive species.	The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.5.2	Continue to manage and treat Invasive Alien Plant Species, in line with developed IAPS Management Plans, in the scheme areas for flood relief schemes and coastal projects.	The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.	0	+	0	0	0	0	0	0	0	0	0
4.5.1.5.3	Work with partners to promote understanding of the role and impacts of Invasive species on local biodiversity, and promote best practice for citizens, businesses and vendors.	This is a promotional action which will have no real environmental effect when considered in isolation. The implementation of this action is likely to generate some degree of positive effects for biodiversity, flora and fauna.	0	+	0	0	0	0	0	0	0	0	0
4.5.2.1.1	Support the Water Framework Directive Regional Operational Committees' activities and assist in the improvement of water quality standards.	This engagement action has the potential to support WFD related objectives. The improvement of water quality standards will have positive effects on biodiversity.	0	+	0	0	0	0	0	+	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.2.1.2	Support LAWPRO in their community climate programmes and projects.	The action will serve to promote water quality improvement initiative and climate action. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan.	0	+	0	0	0	0	0	+	0	0	+
4.5.2.1.3	Work with partners LAWPRO, Uisce Eireann, etc. to identify the impacts of critical and vulnerable receptors in accordance with the River Basin Management Plan and Water Framework Directive and assist in the improvement of river water quality and restoration projects.	The improvement of river water quality standards and restoration will have positive effects on water quality and biodiversity. This action may support development or restoration works, including works at surface water bodies, that have the potential to have a range of unintended, negative environmental impacts if carried out, including impacts on water quality and biodiversity, including aquatic ecology or riparian corridors.	-	+/-	0	0	0	0	-	+/-	0	0	0
4.5.2.1.4	Utilise natural flood management where feasible and financially viable.	The utilisation of natural flood management may lead to works taking place in the vicinity of water bodies e.g. restoring river bends and creation of saltmarshes. In the absence of any mitigation, such works could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems. Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.	-	+/-	0	0	0	0	-	+/-	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.2.1.5	Expand promotion of awareness of best practice to all users in reducing the impact of biocides on water bodies.	This promotional action will have not real environmental effect when considered in isolation. The action has the potential to support a reduction in the use of biocides which will positively affect water quality and biodiversity.	0	+	0	0	0	0	0	+	0	0	0
4.5.2.1.6	Promote citizen science initiatives including those focusing on water quality.	This promotional action will have not real environmental effect when considered in isolation. The action has the potential to support initiatives which will positively affect water quality and biodiversity.	0	+	0	0	0	0	0	+	0	0	0
4.5.2.1.7	Monitor and administer waste water discharges to waters and undertake inspections to ensure compliance with discharge licence requirements.	This monitoring action will have no real environmental effect when considered in isolation, however may drive better enforcement and compliance, thus leading to water quality and biodiversity related improvements.	0	+	0	0	0	0	0	+	0	0	0
4.5.2.1.8	Meet annual targets for domestic waste-water treatment systems inspections per EPA National Inspection Plan.	This action may lead to improved water quality and aquatic ecology improvements.. The adoption of this action will support the full realisation of the vision and main objectives of the plan.	0	+	0	0	0	0	0	+	0	0	0
4.5.2.2.1	Implement the National Clean Air Strategy.	The action has the potential to have a very significant, positive effect on local air quality. This action is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	+	0	0	0	+
4.5.2.2.2	Monitor and enforce Solid Fuels Regulations and Low Smoke zones, with inspections of fuel suppliers to address unauthorised sales of unapproved solid fuels.	The action has the potential to have a very significant, positive effect on local air quality. This action is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. This action will support a positive effect on local air quality.	0	0	0	0	0	0	+	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.2.2.3	Promote awareness of the importance of clean air and the impacts of air quality.	This promotional action will have no real environmental effect when considered in isolation. The action may support and underpin local air quality improvements and a slight reduction in GHG emissions in Cork County.	0	0	0	0	0	0	+	0	0	0	+
4.5.2.3.1	With partners, undertake a Coastal Vulnerability Assessment of the Cork coastline to assess the impact of sea level rise to shoreline change of the Cork Coastline, to inform integrated coastal zone management and identify areas with particular requirements, and to address coastal erosion and implement coastal flooding prioritising ecosystem-based adaptation actions.	The progression of coastal erosion and flood resilience related actions have the potential to lead to significant development taking place at and in the vicinity of the coast In the absence of any mitigation, such developments could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust) and the receiving noise environment (due to the generation of construction phase noise). Coastal flood and erosion resilience actions have the potential to have positive environmental effects. The possible development of nature based solutions and SuDS as part of a coastal defence strategy has the potential to have slight to significant, positive effects on biodiversity and water quality. The delivery of coastal defence actions have the potential to reduce coastal flood and erosion risk and prevent future coastal flood and erosion events. Reducing coastal flood and erosion risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood and erosion events; including ecological receptors. The implementation of a coastal defence strategy is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of coastal erosion. This may have also a beneficial impact on inter-related environmental components that could potentially be impacted by coastal erosion.	-	-	0	0	+	0	-	-+/-	0	-	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.2.3.2	Assist in the development of a Coastal Vulnerability Index and GIS tool. This is intended to illustrate the exposure risk along the entire Cork County coastline. This tool will inform the strategic planning of coastal management along the cork coastline.	This action will have no real environmental effect when considered in isolation. This action will provide baseline data which will inform coastal defence strategies and is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of coastal erosion. This may have also a beneficial impact on inter-related environmental components that could potentially be impacted by coastal erosion.	0	0	0	0	+	0	0	0	0	0	+
4.5.2.3.3	Conduct Beach Sediment Transportation study, to monitor select sites, document coastal change over time, validate predictive models and inform funding and future interventions.	This is a monitoring based action which will have no real environmental effect when considered in isolation. his action will provide baseline data which will inform funding for coastal defence strategies and is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of coastal erosion. This may have also a beneficial impact on inter-related environmental components that could potentially be impacted by coastal erosion.	0	0	0	0	+	0	0	0	0	0	+
4.5.2.3.4	With stakeholders, identify climate adaptation measures for coastal infrastructure & associated defences, and utilize natural coastal management where feasible and financially viable.	This action will have no real environmental effect when considered in isolation. The progression of coastal defences and infrastructure related actions have the potential to lead to significant development taking place at and in the vicinity of the coast In the absence of any mitigation, such developments could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust) and the receiving noise environment (due to the generation of construction phase noise). Coastal defence actions have the potential to have positive environmental effects. The possible development of nature based solutions and SuDS as part of a coastal defence strategy has the potential to have slight to significant, positive effects on biodiversity and water quality.	-	-	0	0	+	0	-	-+/-	0	-	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Improving coastal defences can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood and erosion events; including ecological receptors. The implementation of a coastal defence strategy is likely to have slight to significant positive effects on the receiving soils environment - through the prevention of coastal erosion. This may have also a beneficial impact on inter-related environmental components that could potentially be impacted by coastal erosion.											
4.5.3.1.1	Implement Heritage plan for all aspects of conservation, awareness and recording of all aspects of heritage (built, natural, cultural) ensuring cognisance is taken of climate change.	This action will support the reduction of GHG emissions due to electricity and heating use at heritage features, resulting in climate benefits. This action may support energy upgrade/retrofit works taking place at heritage features. Such works can generate noise, dust and light and could also impact on the conservation status of protected structures or the context in which heritage features sit.	-	0	0	+/-	0	0	-	0	0	0	+
4.5.3.1.2	Incorporate climate resilience through Built Heritage Investment scheme, Historic Structure Fund and any other relevant funds introduced.	This action will support the reduction of GHG emissions due to electricity and heating use at heritage features, resulting in climate benefits. This action may support energy upgrade/retrofit works taking place at heritage features. Such works can generate noise, dust and light and could also impact on the conservation status of protected structures or the context in which heritage features sit.	-	0	0	+/-	0	0	-	0	0	0	+
4.5.3.1.3	Work with partners to support the upskilling required for the delivery of energy renovation and retrofitting in historic buildings and pursue efforts to secure grant funding for same.	This is an educational/financial action which will have no real environmental impact when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.5.3.2.1	Work with stakeholders to foster an inclusive, shared narrative to bring communities on the journey of change in tackling climate action & biodiversity loss and promote celebration of the relationship between culture and natural environment.	This promotional/educational action which will have no real environmental impact when considered in isolation. The adoption of this action will support climate action and the full realisation of the vision and main objectives of the plan.	0	0	0	0	0	0	0	0	0	0	0
4.5.3.2.2	Support artist organisations and stakeholders to adopt environmental best practice in their work structures.	This action is likely to have a slight positive environmental effect.	0	0	0	0	0	0	0	0	0	0	0
4.5.3.2.3	Support cultural heritage knowledge and practices that contribute to sustainability.	This action is likely to have a slight positive environmental effect.	0	0	0	0	0	0	0	0	0	0	0
4.5.3.2.4	Support Green Schools and Heritage in Schools programmes to promote biodiversity and climate issues to schools.	This promotional action which will have no real environmental impact when considered in isolation. The adoption of this action will support climate action and the full realisation of the vision and main objectives of the plan within the community.	0	0	0	0	0	0	0	0	0	0	+
4.5.3.2.5	Promote and support annual National Hedgerow Week.	This action is promotional in nature and will have no real environmental impact when considered in isolation. The action will support the protection and enhancement of hedgerow and has the potential to generate slight to significant effects for biodiversity in the county. The enhancement of hedgerow may result in an additional degree of carbon sequestration, marginally offsetting the effects of GHG emissions. The enhancement of hedgerow may create flight corridors for bats and nesting habitats for birds.	0	+	0	0	0	0	0	0	0	0	+
4.5.3.2.6	Support stakeholders in incorporating biodiversity in land use, and work to support the protection of high-nature-value farmland and associated grassland biodiversity through sustainable measures such as farming	This action will support the protection and enhancement of biodiversity. The adoption of this action will support climate action and the full realisation of the vision and main objectives of the plan. The action may support agricultural land use sequestration to a degree, generating positive climate effects.	0	+	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	practices that support soil sequestration.												
4.5.3.2.7	Work in partnership with stakeholder groups to assist communities dealing with challenges including decarbonisation and environmental challenges.	This action which will have no real environmental impact when considered in isolation. The adoption of this action will support climate action and the full realisation of the vision and main objectives of the plan.	0	0	0	0	0	0	0	0	0	0	0
4.5.3.2.8	Work with stakeholders to promote awareness and engagement with sustainable fishing practices and raise awareness of marine pollutions.	This action will may support the use of sustainable fishing practices and a decrease in marine pollutions. This action will prevent negative impacts to habitats, water quality and biodiversity.	0	0	0	0	0	0	0	0	0	0	0
4.5.4.1.1	Support sectoral and national afforestation targets in mitigating climate change and the promotion of sustainable forest management initiatives.	Afforestation may result in a degree of carbon sequestration which will have positive effects on the environment. Afforestation projects have the potential to adversely affect water and soil quality if forestry regulations are not followed. Habitat loss, habitat fragmentation and biodiversity loss are potential negative impacts of afforestation projects.	0	+/-	0	0	-	+	0	-	0	0	+
4.5.4.1.2	Develop a Tree Strategy to provide a framework for the planning, protection, planting and management of trees and woodlands within Cork County.	This action will have positive biodiversity effects and is likely to increase tree planting which will have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for negative biodiversity impacts if non-native/ invasive tree species are planted.	0	+/-	0	0	-	+	0	-	0	0	+
4.5.4.1.3	Work with stakeholders to establish a baseline and further develop targets for new tree cover pertaining to Cork County.	This action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.5.4.1.4	Support the implementation of the recommendations of the National Land Use Review.	The National Land Use Review has not been finalised and is still in Phase 1. All possible environmental impacts therefore could not be considered at this time.	0	0	0	0	0	+	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		It can be expected that this action has the potential to promote beneficial land use leading to a better quality environment and increased levels of GHG emission sequestration.											
4.5.4.1.5	Support the implementation of the National Peatlands Strategy.	This action will support the management of peatlands. This action has the potential to support positive impacts on biodiversity and water quality, and protect habitats. The restoration of peatlands has the potential to increase the level of GHG sequestration associated with these lands, resulting in positive climate effects. In the absence of proper design or appropriate environmental mitigation supported peatland restoration projects may lead to a variety of unintended environmental impacts, including slight to significant negative impacts on hydrology or hydrogeology and inter-related environmental components.	-	+/-	0	0	+/-	+	0	+-	0	+	+
4.5.4.1.6	Implementation of County Development Plan Policy which seeks to achieve a net gain in green infrastructure through the protection and enhancement of existing assets and the provision of new green infrastructure.	This action will have wide ranging slight to very significant positive effects on biodiversity, and climate. In the absence of any mitigation, works involved in the enhancement of existing or the construction of new green infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	+/-	0	-	0	0	-	-	+	0	+
4.5.5.1.1	Encourage the promotion of sustainable land use practices and nature-based solutions to water resource management and flooding which can enhance community resilience by providing natural flood defences, promoting climate adaptation.	The progression of flood resilience related action has the potential to lead to development taking place, including at and in the vicinity of water bodies. In the absence of any mitigation, such development could potentially have a variety of negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), the	+/-	+/-	0	-	0	+	-	+/-	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PH H	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		receiving noise environment (due to the generation of construction phase noise), and the receiving human environment. The promotion of sustainable land use and nature based solution can lead to a variety of positive environmental effects, such as increased land use GHG sequestration and positive biodiversity and water quality effects. Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SuDS has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including human receptors, ecological receptors and cultural heritage assets.											
4.5.5.1.2	Promote future proofing in the design and planning of new development to fully consider the potential impacts of climate change and the need for measures to increase the resilience of development to any such impacts.	This action has the potential to shape development planning processes and the character of built development. Embedding climate resilient into development planning has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including human receptors, ecological receptors and cultural heritage assets. In the absence of any mitigation, climate adaptation related development could potentially have a variety of negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), the receiving noise environment (due to the generation of	+/-	+/-	0	-	0	+	-	+/-	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		construction phase noise), and the receiving human environment.											
4.5.5.1.3	Support an integrated approach to the management of surface water catchments and the use and development of lands adjoining watercourses.	This action will support better planning generally and has the potential to lead to better management of surface water catchments, improvements in water quality and reductions in flood risk.	0	0	0	0	0	0	0	+	0	0	+

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Economy (Agriculture, Industry, Tourism and Business)

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6.1.1.1	Promote and support the delivery of educational opportunities on green skills through collaboration with industry and academia.	This educational action will underpin and support the effective delivery of climate action in the community by promoting green skills. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.2	Work with stakeholders to monitor the needs of businesses in terms of developing new programmes to assist businesses in their growth and how they will deliver lower carbon goods and services.	This monitoring action will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.3	Liaise and collaborate with other agencies, stakeholders and education providers to assist businesses in their transition to a low carbon economy.	This action will promote a reduction in carbon consumption within the local authority area. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.4	Support assessment of key risks and drivers for a Just Transition in Cork County that provides insights and recommendations to understand, plan and navigate the climate transition in a way that is fair and equitable.	This action will not have a real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.6.1.1.5	Promote and support small enterprises with investment in energy efficient technologies and equipment through grants such as the Energy Efficiency Grant.	This promotional/financial action will promote energy efficiency. This action has the potential to support organizational GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.6	Support micro-SMEs with consultancy services and mentoring towards the development of sustainability management plans through programmes like Green for Micro and Greenstart.	This action has the potential to support Commercial sector related GHG emission reductions.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6.1.1.7	Work with other stakeholders to promote and support Cork County as a sustainable tourism destination.	This promotional action will support sustainable tourism within the County. The action has the potential to have a net positive effect for climate action and awareness within the County. Recreational activity in natural spaces are not inherently damaging. However, there are known impacts associated with inappropriately managed activities in sensitive habitats such as Dune systems. Therefore, the promotion of access and engagement with natural spaces needs to be carefully considered. If implemented correctly this action is likely to have moderate positive environmental effect in terms of water quality improvements, engagement with nature and biodiversity enhancements. The action should take into account other environmental factors such as biodiversity.	0	+/-	0	0	0	0	0	+	0	+	+
4.6.1.1.8	Continue to support clusters such as the Cork Energy cluster in their activities to mobilise stakeholders in the energy sector to collaborate and implement climate action measures.	The action will serve to promote Commercial sector climate action and the development of climate-positive measures. It may lead to decreased GHG emissions. The action also supports the goals of the climate action plan and supports the full realisation of the vision and objectives of the plan	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.9	Encourage the development of locally sustainable enterprises in the County as well as a culture for shopping locally, including shops and farmers markets.	This action is promotional in nature and will have no real effect when considered in isolation. This action has the potential to support the reduction of lifecycle GHG emissions associated with products sourced from afar.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.1.10	Explore zero/low carbon models of transporting goods in Cork County e.g the use of cargo-bike hire schemes.	This research action will have no real environmental effect when considered in isolation. This action supports a potential reduction of vehicle related emissions. This could lead to a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	-	+	0	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		The action may also lead to slight to moderate local air quality improvements. The scalable adoption of vehicles based on certain alternative fuels may contribute to the expansion of alternative fuel production sectors. These sectors may indirectly cause environmental effects (including uncertain and potentially negative effects) as a result of fuel sourcing, production and supply processes.											
4.6.1.2.1	Support climate action implementation as part of all local economic development policies, programmes and initiatives, including providing incentives and support for local enterprises to operate on a sustainable model, in collaboration with partners. Assist rural enterprises to transition to a low carbon model is core to this.	This financial action will serve to underpin and promote a reduction in Commercial sector GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.2.2	Support European and national programmes such as LEADER that enable enterprises to transition to low carbon / zero carbon models.	This financial action will serve to underpin and promote a reduction in Commercial sector GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.3.1	Support the development of countywide climate-related educational and awareness information events, communication campaigns and guidance documentation.	This promotional/educational action will support the effective delivery of climate action in the community. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.3.2	Liaise with relevant stakeholders e.g clusters and business networks etc throughout the County to raise awareness, promote and explore initiatives to encourage the business community to reduce their carbon footprint and adapt to climate change.	This engagement action will have no real environmental effect when considered in isolation. The adoption of this action will support the full realisation of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6.1.3.3	Promote the greening of festivals and events in Cork County	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.3.4	Promote the circular economy to businesses.	Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.6.1.3.5	Provide information and raise awareness to Cork County enterprises and business groups to promote supports to undertake retrofits, energy efficiency and renewable energy installation on commercial buildings.	The action has the potential to encourage climate action to business within the LA region, which could lead to a positive impact on the climate environment and a general lowering of GHG emissions. This action has the potential to support renewable energy development and building retrofits in the LA functional area that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts, glint and glare related impacts, construction related impacts, and impacts on the conservation status of protected structures.	-	-	-	-	0	0	-	0	0	0	+
4.6.1.4.1	Develop new Remote Working Hubs in Cobh, Mitchelstown and Newmarket and develop others where appropriate. This will reduce fuel use through a reduction in transport emissions and allow people to work where they live.	The implementation of this action is likely to generate some degree of positive effects for GHG emissions. Digital hubs can play a role in dissipating urban pressures and lowering commuting times, thereby lowering vehicle-related GHG emissions. For the citizen, this can mean a higher quality of life.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.4.2	Continue to promote, maintain and support existing hubs including Fermoy, Bantry and Macroom.	The implementation of this action is likely to generate some degree of positive effects for GHG emissions. Digital hubs can play a role in dissipating urban pressures and lowering commuting times, thereby lowering vehicle-related GHG emissions and noise pollution associated with driving.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6.1.5.1	Participate in a national public awareness campaign to promote householders' knowledge of how their septic tank works and the effects of septic tank and agricultural runoff on bathing water. Provide information and advice on what routine maintenance should be carried out.	This promotional/engagement action will underpin and support water quality improvement.	0	0	0	0	+	0	0	+	0	0	0
4.6.1.5.2	Run an awareness campaign, in partnership with stakeholders, to advise farmers and the public of the requirement not to spread slurry during the closed period and to encourage the public to report any such incidents to Cork County Council.	This promotional/engagement action will underpin and support water quality improvement.	0	0	0	0	+	0	0	+	0	0	0
4.6.1.5.3	Run an awareness campaign to advise householders to minimise use of pesticides and to use pesticides responsibly.	Promoting the reduced use of pesticide in the community will likely prevent to some degree the occurrence of environmental pollution incidents.	0	0	0	0	+	0	0	+	0	0	0
4.6.1.5.4	Work with stakeholders to promote local food, thereby reducing food miles.	Support local food production could potentially increase the amount of locally produced food bought and consumed, and decrease the amount of food sourced from afar. This action therefore has the potential to reduce lifecycle GHG emissions associated with food production and supply, leading to a slight positive effect on climate.	0	0	0	0	0	0	0	0	0	0	+
4.6.1.5.5	Work in partnership with farmers to improve practices and infrastructure.	This collaborative action has the potential to lead to environmental benefits, including biodiversity, water quality and soil quality related benefits. The action could have unintended adverse effects to water quality and biodiversity should misguided or inappropriate regimes be put forward. The development of farm infrastructure may lead to unintended environmental effects, including construction related effects.	-	+/-	0	0	+	0	-	+/-	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.6.1.6.1	Meet annual inspection targets as per EPA National Agriculture Inspection Plan. This reduces emissions associated with farmyards and in turn protects biodiversity of receiving waters and public health.	This inspection action will have no real environmental effect when considered in isolation. This action has the potential to support the protection of water quality, as well as biodiversity through monitoring and encouragement of god environmental practice.	0	+	0	0	0	0	0	+	0	0	0
4.6.1.7.1	Maintain collaboration and partnership with other public bodies operating in the county working towards improving water quality.	This action will have no real environmental effect when considered in isolation. This action will support an improvement of water quality within the LA area.	0	+	0	0	0	0	0	+	0	0	0
4.6.1.7.2	Work with LAWPRO (Local Authority Water Programme) to identify the impacts of critical and vulnerable receptors in accordance with the River Basin Management Plan and Water Framework Directive.	This research action will have no real environmental effect when considered in isolation. This action has the potential to have positive effects to water quality once vulnerable/ critical receptors are identified as protection measures can then be put in place.	0	+	0	0	0	0	0	+	0	0	0
4.6.1.7.3	Support and engage with locally and nationally led European Innovation Partnership (EIP) projects in County Cork with biodiversity, climate and community benefits.	This action has the potential to have positive environmental effects, particularly to biodiversity, water and air quality.	0	+	0	0	0	0	0	+	0	0	0
4.6.1.8.1	Assist in the improvement of water quality standards as set out in the Water Framework Directive through the agricultural inspection programmes.	This action has the potential to have positive environmental effects, particularly to water quality.	0	+	0	0	0	0	0	+	0	0	0
4.6.1.8.2	Use weather forecasts to predict high rainfall events which could impact on bathing water quality at monitored bathing waters. Based on risk assessment, issue warning notices at beaches where it is predicted that water quality may be negatively impacted by weather event.	This action has the potential to support the protection of human health.	+	+	0	0	0	0	0	+	0	0	0

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Transportation

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.7.1.1.1	Collaborate with communities and stakeholders with the Cork Metropolitan Area Transport Strategy (CMATS).	This collaborative action will likely result in better public transport services where required, encouraging the use of public transport over private cars, and reducing GHG emissions related to transport.	0	0	0	0	0	0	0	0	+	0	+
4.7.1.1.2	Collaborate with communities and stakeholders with the Local Transport Plans for towns as the plans are developed by the Council.	This collaborative action will likely result in better public transport services where required, encouraging the use of public transport over private cars, and reducing GHG emissions related to transport.	0	0	0	0	0	0	0	0	+	0	+
4.7.1.1.3	Collaborate with communities and stakeholders in developing County Cork Rural Transport in line with relevant strategies such as the Connecting Ireland Rural Mobility Plan.	This collaborative action will likely result in better public transport services where required, encouraging the use of public transport over private cars, and reducing GHG emissions related to transport.	0	0	0	0	0	0	0	0	+	0	+
4.7.1.2.1	Develop Active travel projects throughout the county which can deliver greatest behavioural change.	This action has the potential to encourage modal shift and the use of active travel networks and public transport. This action supports the development of additional cycling and walkway infrastructure. In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.	-	-	0	0	0	0	-	-	+	0	+
4.7.1.2.2	Planned urban development road improvements to incorporate Active travel elements as appropriate, having due to regard to environmental sensitivities such	This action has the potential to encourage modal shift and the use of active travel networks and public transport. This action supports the development of additional cycling and walkway infrastructure.	-	-	0	0	0	0	-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	as the receiving water environment, biodiversity, European sites and local air quality, and opportunities to promote nature based solutions.	In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts. This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.											
4.7.1.2.3	Continue the ongoing development of Greenways, such as Midleton - Youghal Greenway.	In the absence of any mitigation, works involved in the construction of Greenways have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.	-	-	0	0	0	0	-	-	+	0	+
4.7.1.2.4	Work with Stakeholders to promote the wider benefits of active travel.	This promotional action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+
4.7.1.2.5	Work with relevant authorities in the development of “Safe route to schools”.	This action has the potential to encourage modal shift and the use of active travel networks and public transport. This action supports the development of additional cycling and walkway infrastructure. In the absence of any mitigation, works involved in the construction of additional active travel infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction) and biodiversity impacts.	-	-	0	0	0	0	-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		This action also has the potential to generate some degree of positive environmental effect due to a reduction in vehicle use.											
4.7.1.2.6	Apply for funding for Active Travel projects	This action is financial in nature and will have no real environmental effect when considered in isolation.	0	0	0	0	0	0	0	0	0	0	0
4.7.1.3.1	Promote higher levels of density and growth in locations benefitting from existing high quality public transport capacity.	This action would encourage development in areas where public transport infrastructure is already in place, encouraging the use of public transport over private cars without having to install new infrastructure. This will have a positive effect on the environment.	+	0	0	0	0	+	+	0	+	0	+
4.7.1.3.2	Align population and employment growth through integration of land use and transport planning.	This action has the potential to encourage use of public transport and active travel over private vehicle use. This would reduce GHG emissions related to transport. The development of active travel infrastructure has the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	+/-	-	0	0	0	+	+/-	-	+	0	+
4.7.1.4.1	Work with the relevant stakeholders in the development of the proposed National EV charging network within County Cork.	This action has the potential to reduce transport sector GHG emissions within the LA functional area in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality. This action could also lead to the delivery of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the LA region. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality	+/-	-	0	0	0	+	+/-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.											
4.7.1.4.2	Engage with ESB to identify areas where the electricity network infrastructure can support EV charging	This action has the potential to support the reduction in transport sector GHG emissions within the LA in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality. This action could also lead to the delivery of ancillary electrical infrastructure including grid connection routes across the extent of the LA region. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	+/-	-	0	0	0	+	+/-	-	+	0	+
4.7.1.4.3	Liaise with Communities to raise awareness of EV grants, such as those from SEAI.	This action has the potential to increase the use of more sustainable vehicles and a reduction in the number of ICE vehicles. This would lead to a reduction in the GHG emissions associated with transport. This action has the potential to have positive environmental impacts.	0	0	0	0	0	0	0	0	0	0	+
4.7.1.4.4	Promote the use of e-vehicles through the provision of e-vehicle charge point requirements in planning applications.	This action will support the local authority in reducing transport sector GHG emissions in line with climate policy and legislation and emission reduction targets. This has the potential to generate some degree of positive effects on climate and local air quality. This action could also lead to the delivery of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the LA region. In the absence of any mitigation,	+/-	-	0	0	0	+	+/-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including noise impacts, local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.											
4.7.1.4.5	Promote the use of low emission fuels.	This action is quite broad and non-specific, however, the scalable adoption of vehicles based on certain alternative fuels may contribute to the expansion of alternative fuel production sectors. These sectors may indirectly cause environmental effects (including uncertain and potentially negative effects) as a result of fuel sourcing, production and supply processes.	0	0	0	0	0	-	0	0	0	0	+
4.7.1.5.1	Support and develop the existing Community Enterprise Centres (Hubs) network.	This action has the potential to have positive environmental effects. This action has the potential to contribute to a degree to reducing the level of GHG emissions associated with the reduction in transport use.	0	0	0	0	0	0	0	0	0	0	+
4.7.1.5.2	Encourage Council staff to use online meeting options in place of in person meetings where feasible.	This action will likely promote a reduction in transport emissions associated with home to work commuting - which has the potential to generate some degree of positive effects on climate and local air quality.	0	0	0	0	0	0	0	0	0	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.

Built Environment

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.8.1.1.1	Support sustainable offshore wind energy projects at appropriate locations and scales & the development of associated infrastructure at ports to facilitate these developments in accordance with the CDP.	This action will promote and support renewable energy development within the county that could generate a range of slight to significant positive environmental effects, including positive effects on climate, water quality, the soils environment and biodiversity. In the absence of mitigation, renewable energy development could have negative slight to very significant environmental effects, including biodiversity impacts, and impacts on water quality environment (due to development construction phase run-off of silt or cement-based material). Such potential effects can be mitigated by considering planning and environmental-related matters and constraints early on during the assessment/design process.	-	-	-	-	-	0	-	-	+	0	+
4.8.1.1.2	Promote renewable energy generation, storage, and distribution infrastructure in accordance with the CDP within the county.	This action will promote and support renewable energy development within the county that could generate a range of slight to significant positive environmental effects, including positive effects on climate, water quality, the soils environment and biodiversity. In the absence of mitigation, renewable energy development, including associated linead development, could have negative slight to very significant environmental effects, including biodiversity impacts, and impacts on the water or soils environment (due to development construction phase run-off of silt or cement-based material). Such potential effects can be mitigated by considering planning and environmental-related matters and constraints early on during the assessment/design process.	-	-	-	-	-	0	-	-	+	0	+
4.8.1.2.1	Explore opportunities for establishing district heating to serve council assets including social housing in the county.	This is a study-related action and will have no real environmental effect when considered in isolation. Depending on the outcome of this study, it has the potential to support the delivery of Residential sector GHG emission reductions and energy efficiency in the LA region.	-	-	0	-	-	0	-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		In the absence of any mitigation, such development, which could include extensive pipe laying works, could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, flora and fauna; and the receiving air environment (due to the generation of construction dust).											
4.8.1.2.2	Support stakeholders who wish to develop district heating systems.	This action has the potential to support the delivery of Residential sector GHG emission reductions and energy efficiency in the LA region. In the absence of any mitigation, such development, which could include extensive pipe laying works, could potentially have a variety of significant, negative environmental effects, including effects on: water quality, biodiversity, flora and fauna; and the receiving air environment (due to the generation of construction dust).	-	-	0	-	-	0	-	-	+	0	+
4.8.1.3.1	Support and implement national policy on EV charging at nondomestic locations.	The expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts. The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	+/-	-	0	0	0	+	+/-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.8.1.3.2	Engage with ESB to identify locations where electricity network infrastructure can support EV charging facilities.	The expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts. The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements.	+/-	-	0	0	0	+	+/-	-	+	0	+
4.8.1.3.3	Develop and implement a policy for EV Charging as part of a wider Taking in Charge policy.	The expansion of the EV charging network will lead to the development of multiple charging points and ancillary electrical infrastructure including grid connection routes across the extent of the local authority's functional area. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts. The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via	+/-	-	0	0	0	+	+/-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		this action relative to national GHG emission reduction targets and requirements.											
4.8.2.1.1	Investigate the use of alternative low carbon material in road construction	This action has the potential to reduce embodied GHG emissions associated with road construction and maintenance projects.	0	0	0	0	0	0	0	0	+	0	+
4.8.2.1.2	Reduce embodied carbon emissions by using innovative road surfacing material	This action has the potential to reduce embodied GHG emissions associated with road construction and maintenance projects.	0	0	0	0	0	0	0	0	+	0	+
4.8.2.1.3	Investigate other infrastructure where low carbon material could be used such as footpaths, bridges, roundabouts, amenity areas, recreational trails, public realm, and other construction projects.	This action has the potential to reduce embodied GHG emissions associated with road construction and maintenance projects.	0	0	0	0	0	0	0	0	+	0	+
4.8.3.1.1	Promote the retention and reuse of existing building stock as a first preference.	This action will support the reutilisation of existing building stock over the development of new housing stock. This will offset potential embodied GHG emissions associated with new housing development. This action may support refurbishment or retrofitting of housing and building stock, including derelict buildings. There is the potential for light and air pollution during retrofitting works. Retrofitting works may also negatively effect the appropriate conservation of protected structures. Such works may also impinge on protected species present in derelict structures, such as bats.	-	-	0	-	0	0	-	0	0	0	+
4.8.3.1.2	Support provision of information on grant aid for homes and businesses	This action will encourage the retrofit of buildings within the LA region, supporting the reduction/offset of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	-	-	0	-	0	0	-	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.8.3.1.3	Encourage energy efficiency improvements for buildings. Advise and educate businesses, residents on energy efficiency	This action will encourage the retrofit of buildings within the LA region, supporting the reduction/offset of GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	-	-	0	-	0	0	-	0	0	0	+
4.8.3.2.1	Continue to ensure that new buildings meet the building regulations for energy efficiency.	Broadly, the action will promote the carrying out of more climate positive development. The action is likely to have a slight to moderate positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
4.8.3.3.1	Support provision of information on grant aid for onsite renewable generation	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action will support the development of renewable energy development in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.	-	-	-	0	0	0	-	-	0	0	+
4.8.3.3.2	Encourage onsite renewable generation installation	The action has the potential to provide access to climate action initiatives to all within the community - which could lead to a positive impact on the climate environment and a general lowering of GHG emissions in the LA Region. This action will support the development of renewable energy development in the LA region that could have a variety of slight to potentially significant negative environmental effects, including biodiversity impacts.	-	-	-	0	0	0	-	-	0	0	+

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4.8.4.1.1	Develop a design ethos that considers climate action in the development of new buildings by Cork County Council or on its behalf. This approach will consider a range of design options including, but not restricted to the use of low carbon materials, building fabric insulation, green roofs, solar photovoltaics, and rainwater harvesting, taking account of government policy, design standards and guidelines.	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight to moderate positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements, as well as water quality and biodiversity. Such development may leade to a variety of unintended negative environmental effects.	-	-	-	0	0	0	-	-	0	0	+
4.8.4.1.2	Prepare and implement an annual funding program for deep energy retrofitting of existing Council housing stock	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	-	-	0	-	0	0	-	0	0	0	+
4.8.4.1.3	Phase out all fossil fuel-based heating systems by 2030	This action has the potential to lead to several positive environmental effects of varying magnitude. It could lead to positive effects on the climate sector and circularity benefits. It has the potential to result in the offset of Residential sector GHG emissions and lifecycle GHG emissions associated with construction materials and projects. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.	-	-	0	-	0	0	-	0	0	0	+
4.8.4.1.4	Refurbish all newly acquired and vacant houses to a minimum B2 energy rating, with all fossil fuel heating sources removed	This action will support the reduction/offset of Residential sector GHG emissions. The action is likely to have a slight positive environmental effect - having regard to the share of GHG emission reductions that	-	-	0	-	0	0	-	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		can be supported via this action relative to national GHG emission reduction targets and requirements. There is the potential for light and air pollution during retrofitting works. Older houses have the potential to house bats, retrofitting works could therefore disturb bats using these buildings.											
4.8.4.1.5	Work in partnership with our development partners, the Approved Housing Bodies (AHB) sector to ensure that the measures we propose in the delivery of new housing developments are also incorporated in development proposals from the AHB sector	Broadly, the action will promote the carrying out of more climate positive local authority led development. This action will support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues.	0	0	0	0	0	0	0	0	0	0	+
4.8.4.1.6	Run a pilot rainwater harvesting retrofit project in an existing Council housing estate in the Decarbonisation Zone.	The development of nature-based solutions has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The development of such green infrastructure, in particular construction related activity has the potential to have a range of unintended, negative environmental impacts if carried out.	-	-	0	-	0	0	-	0	0	0	+
4.8.4.2.1	Advance installation of underground infrastructure for EV Charging in new social housing estates	The expansion of the EV charging network will lead to the development of ancillary electrical infrastructure including grid connection routes. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts. The delivery of good network of charging infrastructure has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via	-	-	0	-	-	0	-	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		this action relative to national GHG emission reduction targets and requirements.											
4.8.4.2.2	Assess bike parking facilities for new social housing estates.	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - encouraging the use of active travel methods and reducing the amount of vehicle emissions. The minor works required to install bicycle parking is unlikely to have a significant environmental impact.	0	0	0	0	0	0	0	0	0	0	+
4.8.4.2.3	Ensure main electrical connections to all new social houses are designed to be easily retrofitted with electrical car charging points	Broadly, the action will promote the carrying out of more climate positive local authority led development. The action is likely to have a slight positive effect on the climate environment - having regard to the share of GHG emissions that can be offset via this action relative to national GHG emission reduction targets and requirements.	0	0	0	0	0	0	0	0	0	0	+
4.8.4.2.4	Undertake a review of existing estates to identify potential locations for installation of communal EV charging points and bike parking.	The delivery of good network of charging infrastructure and bicycle parking has the potential to promote the use of sustainable travel modes in the community, encourage modal shift and support the reduction of vehicle related emissions. This is likely to have a slight to moderate positive environmental effect - having regard to the share of GHG emission reductions that can be supported via this action relative to national GHG emission reduction targets and requirements. In the absence of any mitigation, works involved in the construction of additional charging point infrastructure have the potential to generate a range of slight to significant environmental effects, including local air quality impacts (through the generation of construction dust), impacts on water quality (through the run-off of silt and cement based products during construction), and biodiversity impacts.	-	-	0	-	0	0	-	0	0	0	+
4.8.4.3.1	Develop a tenant awareness strategy around the benefits of behavioural change with respect to climate action in their homes.	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will support the full realization of the vision and main objectives of the plan in the community.	0	0	0	0	0	0	0	0	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.8.4.3.2	Promote the benefits of wilding and biodiversity in existing housing estates.	This promotional/engagement action will underpin and support the effective delivery of climate action in the LA by promoting awareness and understanding of climate action related issues. The adoption of this action will have positive effects on biodiversity and water quality.	0	+	0	0	0	0	0	+	0	0	+
4.8.5.1.1	Explore opportunities to undertake climate adaptation measures as part of public realm works	This is a study/ research related action and will have no real environmental impact when considered in isolation. This action has the potential to lead to more climate positive development within the LA region.	0	0	0	0	0	0	0	0	+	0	+
4.8.5.1.2	Work with communities to adopt local adaptation measures that reduce local weather impacts considering intensity, duration, and frequency.	This action has the potential to lead to maintenance works on drainage and implementation of nature based solutions/ SUDs. This action has the potential to negatively affect water quality through inappropriate maintenance practices of drains. The development of nature-based solutions has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The development of such green infrastructure, in particular construction related activity has the potential to have a range of unintended, negative environmental impacts if carried out.	0	+/-	0	0	0	0	0	+/-	+	0	+
4.8.5.2.1	Develop & implement SUDS & nature-based approaches to manage surface water and protect rivers from pollutants in road water run-off and slow the addition of water volume to mitigate flooding for development projects	This flood resilience related action has the potential to lead to significant development taking place, including development at and in the vicinity of water bodies. In the absence of any mitigation, supported drainage development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; and the receiving air environment (due to the generation of construction dust).	+	+/-	0	0	0	0	0	+/-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		Flood resilience action has the potential to have positive environmental effects also. The possible development of nature based solutions and SUDS as part of surface water management has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body.											
4.8.5.2.2	Undertake rainwater management planning for all main towns. Assist Planning Policy Unit to develop a rainwater management plan for Urban settlements	This action has the potential to negatively affect water quality through inappropriate maintenance practices of drains. The development of nature-based solutions has the potential to have slight to significant, positive effects on biodiversity and water quality at or downstream of a particular water body. The development of such green infrastructure, in particular construction related activity has the potential to have a range of unintended, negative environmental impacts if carried out.	+	+/-	0	0	0	0	0	+/-	+	0	+
4.8.5.2.3	Support the roll out of Flood Relief Schemes in the County, including those in partnership with the OPW, as identified through the Catchment Flood Risk Assessment and Management (CFRAMS) Programme and in the County Strategic Flood Risk Assessment.	The delivery of flood resilience action also has the potential to reduce flood risk and prevent flood events. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors. The progression of flood resilience related action has the potential to lead to significant development taking place at and in the vicinity of water bodies. In the absence of any mitigation, such development could potentially have a variety of significant, negative environmental effects, including effects on: water quality and the hydrology of water bodies; biodiversity, including flora and fauna reliant on aquatic eco-systems; the receiving air environment (due to the generation of construction dust), and the receiving human environment.	+	+/-	0	0	0	0	0	+/-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.8.5.2.4	Develop a template for rainwater management plans in other urban areas.	This is an administrative related action that will support the delivery of climate adaptation action in the plan generally.	0	0	0	0	0	0	0	0	0	0	+
4.8.5.2.5	Assist the Planning Department with assessment of planning applications to ensure that all new developments/planning applications within the County have flood risk assessments in accordance with the County Development Plan, The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009), the requirements of DECLG Circular P12/2014 and the EU Floods Directive.	Broadly, the action will promote the carrying out of more climate positive development. The action is likely to have a slight positive effect on the climate environment. Reducing flood risk can generate significant, positive effects for a variety of environmental receptors that could be negatively impacted by flood events; including ecological receptors.	+	0	0	0	0	0	0	+	0	0	+
4.8.5.2.6	Develop a Scheme Climate Change Adaptation Plans (SCCAP) template for flood relief schemes.	This is an administrative related action that will support the delivery of climate adaptation action in the plan generally.	0	0	0	0	0	0	0	0	0	0	0
4.8.5.2.7	During the operational lifetime of flood relief schemes, ensure that any upgrades and/or replacements use best available energy efficient technology and/or best practice, including innovative solutions where financially.	This action has the potential to offset future energy related GHG emissions.	0	0	0	0	0	0	0	0	0	0	+
4.8.5.2.8	Ensure that procurement of all works/services follows the Department of Public Expenditure and Reform circular 20/2019: Promoting the use of Environmental and Social Considerations in Public Procurement, guidance from CCC Finance Department, and best practice; i.e. that designs are developed so as to reduce environmental impact, and that	This action will assist the local authority in reducing its organisational GHG emissions, and have positive effects on climate as well as the potential to positively affect biodiversity, air quality and water quality	0	+	0	0	0	0	+	+	0	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
	environmental criteria are included in the procurement process.												
4.8.5.3.1	Assess bridge infrastructure in line with predicted climate impacts.	This action has the potential to cause disturbance to bats during surveys. This action also has the potential to lead to upgrading of bridges, resulting in disturbance and/or loss of habitat for bats, or impacts on the conservations status of protected bridges.	0	-	0	-	0	0	0	0	0	0	+
4.8.5.3.2	Carry out road maintenance and rehabilitation of regional and local roads in accordance with the guidance document on the climate adaptation of regional and local roads	This action has the potential to lead to slight negative environmental effects, such as negative effects on air quality from construction dust, and water quality due to surface runoff during works.	0	-	0	0	0	0	-	-	0	0	+
4.8.5.3.3	Continual assessment of road construction material to adapt to high and low temperature conditions.	This is a study/ research related action and will have no real environmental impact when considered in isolation. This action has the potential to lead to more climate proof roads that can withstand greater freezing and heating events, reducing the amount of road maintenance required in the future.	0	0	0	0	0	0	0	0	0	0	0

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Waste

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.9.1.1.1	Work with stakeholders to promote and support a reduction in consumption of new resources	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.1.2	Promote and support the plastic bottle and aluminium can deposit refund scheme	This action has the potential to reduce incorrect waste disposal and instances of pollution. This action will have some positive environmental effects.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.1.3	Promote and support the single use plastic directive	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.1.4	Promote and support the extended producer responsibility schemes	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.1.5	Work with stakeholders to expand the use of Regulation 28 end of waste criteria	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county. The improper or in appropriate management of waste, including construction and demolition waste, has the potential to lead to environmental pollution or nuisance.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.1.6	Promote and support the operation of Regulation 27 By product regulation to reduce waste disposal.	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county. The improper or in appropriate management of waste, including construction and demolition waste, has the potential to lead to environmental pollution or nuisance.	0	0	0	0	0	0	0	0	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
4.9.1.1.7	Work with stakeholders to ensure segregated waste disposal availability and utilisation	This action has the potential to reduce incorrect waste disposal and instances of pollution. This action will have some positive environmental effects.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.2.1	Continue anti-litter challenge to raise awareness in communities	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.2.2	Work with stakeholders on education and awareness in relation to proper disposal of waste	This promotional action will have positive environmental effects. Generally, the action will serve to promote awareness and the effective delivery of climate action and the circular economy concept within the county.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.2.3	Work with stakeholders on annual waste enforcement priorities	This action has the potential to reduce incorrect waste disposal and instances of pollution. This action will have some positive environmental effects.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.3.1	Manage Closed landfills to minimise emissions	This action has the potential to lead to GHG emissions reductions at landfill sites. Supported landfill remediation works may have unintended negative environmental effects, including effects on biodiversity, European sites, landscape character and visual amenity, or soil, hydrological or water quality related effects.	-	-	-	0	-	+	-	-	+	0	+
4.9.1.3.2	Work with stakeholders to remediate and manage historic landfills	This action has the potential to lead to GHG emissions reductions at landfill sites. Supported landfill remediation works may have unintended negative environmental effects, including effects on biodiversity, European sites, landscape character and visual amenity, or soil, hydrological or water quality related effects.	-	-	-	0	-	+	-	-	+	0	+
4.9.1.3.3	Work with stakeholders to reduce emissions from treatment of leachate	This action has the potential to lead to GHG emissions reductions at landfill sites.	0	0	0	0	0	0	0	0	0	0	+
4.9.1.4.1	Promote civic amenity sites as alternative to kerbside collection for proper disposal of waste	This action will promote good waste management practices in line with waste hierarchy principles. The action may support the development of civic amenity sites, which could create slight to significant	-	-	0	0	-	0	-	-	+	0	+

Action Ref.	Draft LACAP Action	Potential Environmental Effects	PHH	BFF	L	CH	S	LU	AQN	W	MA	TR	CC
		negative environmental impacts on sensitive environmental receptors, including traffic, noise, dust and odour related effects, effects on biodiversity, or effect on soil or water quality - if such sites are inappropriately designed or managed											
4.9.1.4.2	Promote bring banks for disposal of glass containers and food cans	This action will promote good waste management practices in line with waste hierarchy principles. The action may support the development of civic amenity sites, which could create slight to moderate negative environmental impacts on sensitive environmental receptors, including traffic, noise, dust and odour related effects, effects on biodiversity, or effect on soil or water quality - if such sites are inappropriately designed or managed.	-	-	0	0	-	0	-	-	+	0	+
4.9.1.4.3	Support stakeholders in reduction to packaging	This action will promote good waste management practices in line with waste hierarchy principles.	0	0	0	0	0	0	0	0	+	0	+
4.9.1.4.4	Support roll out of 3 bin collection to commercial sector and all domestic customers	This action will promote good waste management practices in line with waste hierarchy principles.	0	0	0	0	0	0	0	0	+	0	+

Key: PHH - Population & Human Health. BFF - Biodiversity, Flora & Fauna. L - Landscape, Seascape & Visual Amenity. CH - Cultural Heritage - Archaeology & Architectural. S - Soils. LU - Land Use. AQN - Air Quality and Noise. W - Water. MA - Material Assets. TR- Tourism & Recreation. CC - Climate Change.

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